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JULY 13, 1918.

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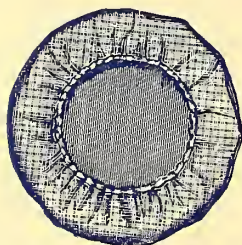
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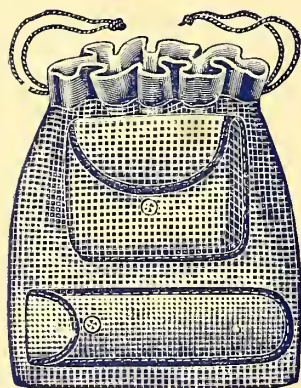
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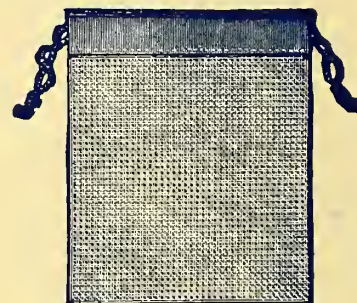
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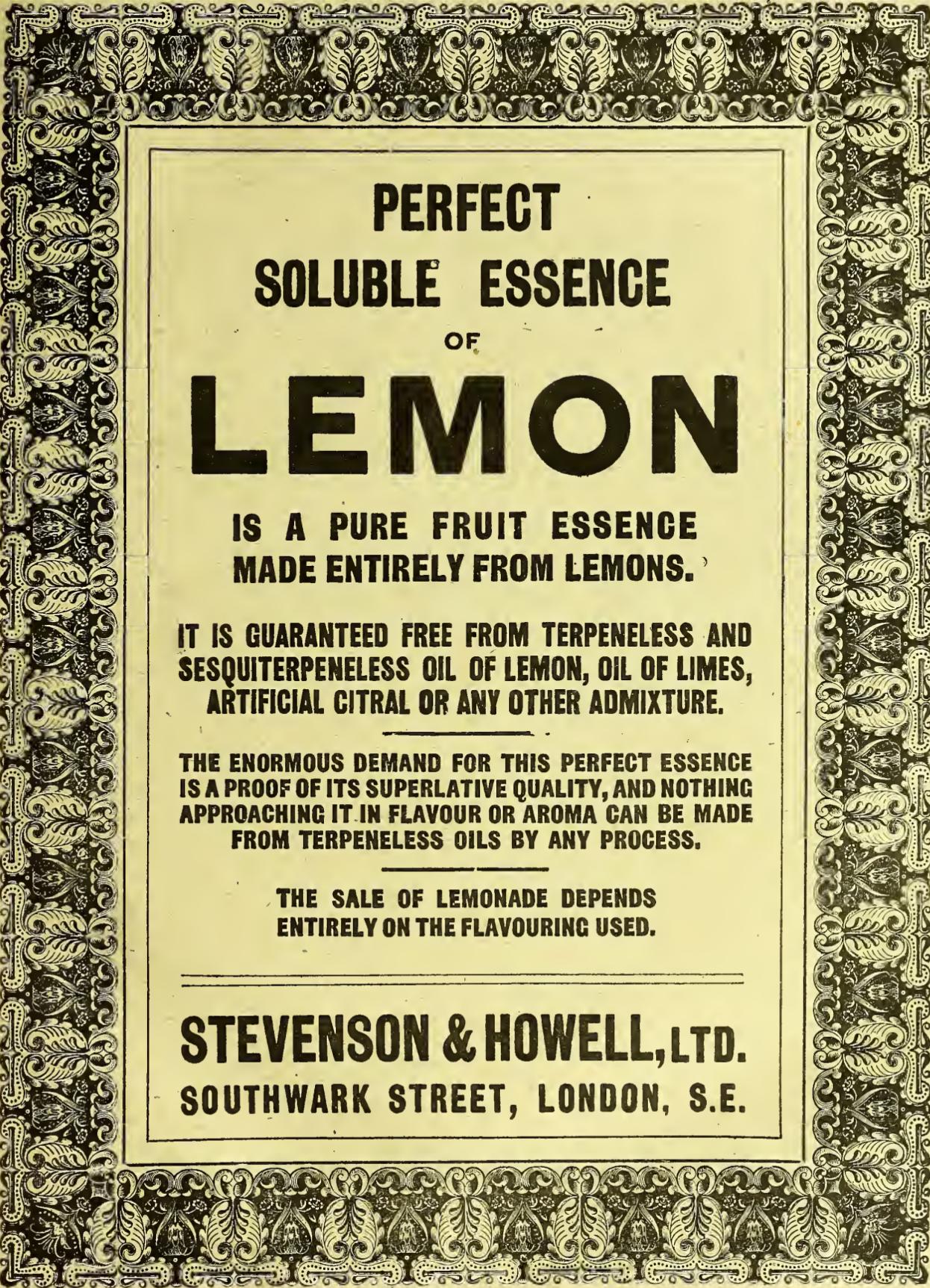
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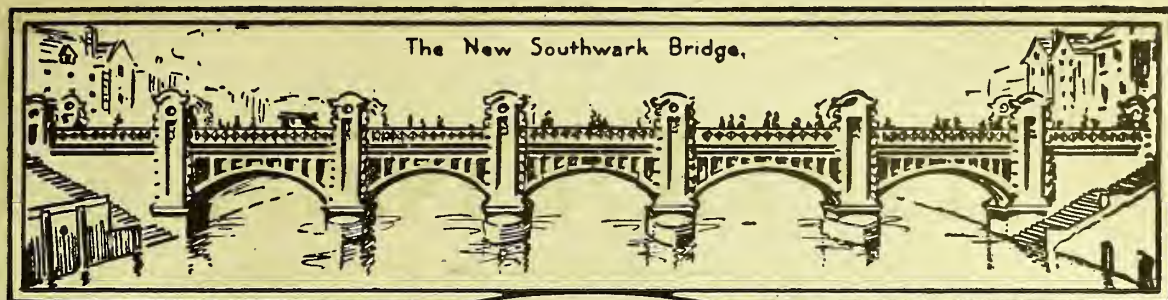
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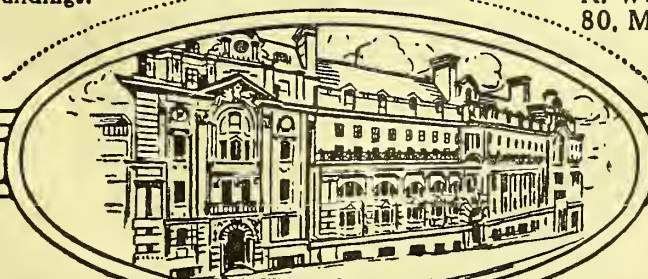
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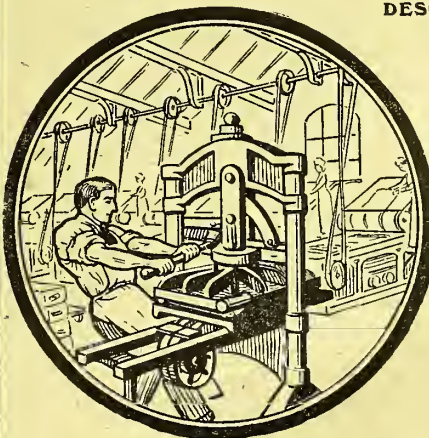
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LABELS... CARTONS... ENVELOPES

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Full-set 10s. 6d., which is deducted from order of £10 upwards.

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GENUINE YELLOW BEESWAX

PARAFFIN WAXES.

ALSO WAXES OF EVERY KNOWN KIND.

The only actual Manufacturing Wax Chandler in the City of London.

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HYDROKINONE, ACID PYROGALLIC, AZOL—The Active Developer,
SODA SULPHITE, SODA CARBONATE, POTASS. BROMIDE,
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DEVELOPERS, TONINGS, &c., for AMATEUR TRADE,
Packed in CARTRIDGES, PACKETS, SCALLOIDS & SOLUTIONS.

MOUNTANT. FLASHPOWDER.
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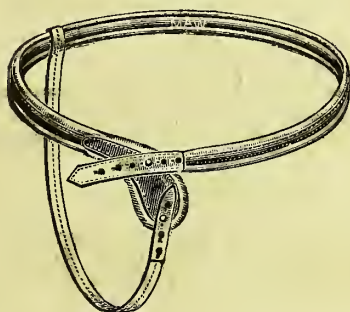
Maw's

Page.

NUMBER 352.

JULY 13, 1918

Maw's Standard Quality Trusses



We are in a position to supply an excellent quality truss, the spring of which is covered with basil leather and lined throughout with buff mole. A first-class article at a low price.

INGUINAL, 28" to 40".

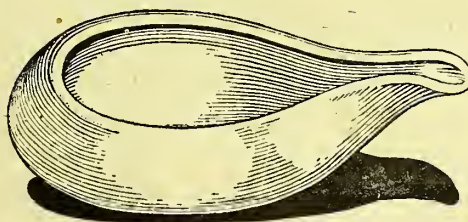
Single ... 3/6 each.
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SCROTAL, 28" to 40".

Single ... 8/6 each.
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"Parex" (Regd.) Feeding Cup

This Feeding Cup is the cleanest and most hygienic article of its kind yet produced. Every part is accessible for cleansing, the old-style covered spout being entirely eliminated.



Its graceful oval shape makes it exceedingly easy to handle in use, convenient alike to both patient and nurse. Being made of earthenware, it can be constantly sterilised if necessary.

PRICE 8/- PER DOZEN.

HOURS OF BUSINESS: 8.30 a.m.—5.30 p.m.

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The most Refreshing, Delightful,
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THE CHEAPEST HARVEST DRINK.

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The OLDEST and LARGEST Firm of

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GERMANS have never had any interest whatever in R. J. F. & B.'s firm, which has been carried on by British partners and with British capital since it was established in 1785. Others who claim to be the only makers of Rennet in England CANNOT SAY THIS.

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The Pasteur Chamberland Filter.

OFFICIAL GOVERNMENT
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Wherever the **PASTEUR
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PRONK, DAVIS & RUSBY, LTD.

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**The "MILNER"
STRAW HAT CLEANER**SELLS WELL
EVERYWHERE**3d.**It is easily used and gives
complete satisfaction.**NINTH SEASON**

6 dozen 10/- net.

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Carriage Paid.

Orders of 20/- 2½%

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**MILNER'S CHEMICAL CO.
LIVERPOOL.****"TOWER"
EARTHENWARE FILTERS**

Sizes from 1 Gallon to 10 Gallons.

Specially suitable for

**ACIDS, ESSENCES,
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PREPARATIONS.****"FARJAK" ASBESTOS
FILTERING MEDIUMS**for use with the above—Pure and
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ESTABLISHED 1798.

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**The Finest Quality
Aerated Waters are
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ESSENCES****Boake
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Soluble Essences are
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Lemon	Ginger Ale
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La-Rola

Rose Bloom

TO YOUR STOCK AT ONCE,

as it is being largely advertised in the
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Do not lose the business
through being out of stock.

It is the most natural tint on the market,
and is selling well wherever introduced.

Lait La-Rola & Glycerine & Cucumber
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All these articles are protected at FACE VALUE.
Write for Display Terms and save 10%.

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We offer

WAXES

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LIQUID PARAFFIN

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WHITE OILS

Send us your inquiries.

J. J. FRANCES & SONS,
LIMITED,

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LIQUID BARKOLA COMPOUND

**Wholesale 26/- per doz.,
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Each bottle (1 oz.) carries instructions to the chemist
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Liq. Barkola Comp., 1 oz.; Tincture of
Gentian (B.P.), 1 oz.; Inf. of Rhubarb,
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Aq. Chlorof., to 8 oz.

Chemists charge according to their own scale for dispensing
THE BARKOLA CO., LTD.,
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Proprietors of Barkola Alvexo, Barkola Balm, &c. &c.

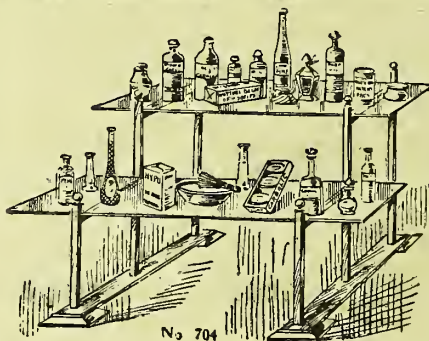
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WINDOW or COUNTER UNIT

A Smart Oak Stand with two 30" x 9"
Plate Glass Shelves, dressed in a few
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Also single Oak Pedestals, Showcases
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Write for full particulars and prices.

SAML. HASKINS & BROS. Ltd.

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1868 to 1918.

"Are not both gainers when the hearts' distress,
Is so divided that the pain is less?"—Crabbe.



Alkaline Indigestion Mixture

Showing the new
"Anchor" Label.

4 oz.	6 oz.	8 oz.	12 oz.
5/6	7/-	8/6	11/6 per dozen

This label, like the Star and Mortar labels, can be reserved to you for your district. All three labels are attractive, dignified and distinctive. They are available for practically every line in the Pharmacy.

SHOWCARDS FOR EACH SERIES.

Why not get one of these labels reserved to you, and start off with
INFLUENZA MIXTURE?

PRICES ARE—

4 oz.	6 oz.	8 oz.	12 oz.
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SACCHARIN TABLETS $\frac{1}{2}$ gr. 330 in 1, **150/- per lb.**

CASH WITH ORDER. IMMEDIATE DELIVERY.

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We keep a list of chemists who stock

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"(WALNUT STAIN)"

and the name of the "nearest" chemist is given to each of the many persons who order single bottles from us daily. Any chemist wishing his name to be placed on that list should send a postcard to

M. VALENTINE, Ltd., 46a Holborn Viaduct, E.C. 1.**TO USERS and DEALERS in METH. SPIRIT and SPIRIT OF WINE.**
FOR QUOTATIONS apply to-**PRESTON'S LIVERPOOL DISTILLERY CO., LD.**

The Largest Makers in the Kingdom.

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**THE WORLD'S KEENEST BUYERS**

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The EVAN WILLIAMS' ORIGINAL HENNA SHAMPOO, through the perfection of its manufacture, is recognised as the standard of Henna quality. It is to be found in every successful establishment because it unfailingly attracts the best class of buyer wherever it is shown.

Our large Advertising Campaign is now in full swing. This has been so arranged to create a demand for our Retailers, and it will pay you to secure your stock without delay. Remember, EVAN WILLIAMS' HENNA SHAMPOO is a proposition which sells itself wherever shown.

*Write TO-DAY for full particulars.*

Our supplies having been RATIONED, we are compelled to make the acceptance of orders subject to the condition that, should we be unable to execute an order in its entirety, customers will accept a proportionate distribution of available stocks.

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CAPSULES of
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of LIME.**

**THE BEST TONIC FOR
FORTIFYING AND BUILDING UP
THE NERVOUS SYSTEM.**

Sold by all Chemists.
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MORRHUOL CHAPOTEAUT



CAPSULES

MORRHUOL DE CHAPOTEAUT
is extracted from cod-liver oil, and
contains all its efficacious proper-
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*It cures Coughs, Bronchitis and Catarrh,
restores the appetite, and gives force to
feeble persons.*

SOLD BY ALL DRUGGISTS.

**CHANDRON'S
DROPS**

(Gouttes des Colonies)

**A harmless antiseptic
preventative against CHOLERA-
FERMENTATION - INDIGESTION
and other intestinal disturbances.**

SOLD BY ALL CHEMISTS



*I find the odor exquisite and
will be charmed to have recalled
by my future. Very Sincerely,
Mary Garden*

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Face Powder

possessed of the elusive fragrance of Diadem Cream, adheres readily to the skin. Made in Blanche, Naturelle, Rachel, and Rose tints. Packed in large artistic boxes, in the distinctive Robartes style and colouring. A sure seller.

Diadem Powder

Advertised and Minimum Retail Price 2/6
Trade, per doz. 20/-



DIADEM

Vanishing Cream

a cream of rare purity and charm, put up in novel white g'obes which have an irresistible appeal and packed in dainty boxes in Robartes' attractive style. Handsome profits for you in selling.

Diadem Cream

Advertised and Minimum Retail Price 3/9
Trade, per doz. 30/-

Window and Counter Materials free on request. Write for particulars.

Special Notice and Offer to the Trade.

Each jar of Diadem Cream contains the following notice:—"On returning 6 of these empty Diadem jars to any Chemist or Hairdresser in the United Kingdom, a new 3/9 size jar will be given you free in exchange." Upon any of our trade customers therefore returning to us 6 of these empty jars, carriage paid, we will immediately forward in return, post free, 2 (3/9 size) jars of Diadem Vanishing Cream.

DECOLTENE

The liquid hair remover

The intelligent depilatory. Simple, safe and effective. Pleasant and harmless. Invaluable during the décolleté vogue. Daintily packed.

Dinkie

The Dainty Deodorant

An attractive line that enjoys good sales. A greaseless Cream that takes the odour out of perspiration. Daintily packed in opal jars.

TRADE TERMS.

DECOLTENE. Advertised and min. Retail price
Trade 30/- per doz.

3/9

DINKIE. Advertised and min. Retail price
Trade 20/- per doz.

2/6

Particulars and Show-cards on request.

ROBARTES, LTD., 128 Jermyn St., London, S.W.1

Here is a line that every Chemist desires, one that is most heavily advertised, does all that is claimed and ensures the retailer a fine P.A.T.A. profit and enhances his reputation.

QUIN-QUENNA

(BETTER THAN A SHAMPOO).

Show it on your counter
and in window—our advertising will do the rest

QUIN-QUENNA is not a "here to-day and gone to-morrow" item, its sales have steadily increased till they now have become most important, thanks largely to the valued assistance given by our chemist friends throughout the country.

QUIN-QUENNA is now about to be even more heavily advertised than in the past, and as our methods were so brimful of success before and the same means are to be employed, it naturally follows that there will be a greater call than ever. We, therefore, suggest that you be prepared to meet this augmented sale. Such papers as *Nash's Magazine*, *New Magazine*, *London Mail*, *Pictures*, *Home Notes*, *Woman's Notes*, *Evening News*, *Daily Mirror*, *Bystander*, *Tatler*, *Story Teller*, *John Bull*, and all Odham's and Cassell's publications, &c., carry our announcements, and many more provincial media, too. Quin-Quenna, as you know, is not a shampoo—it is a hair beautifier, grower, and dandruff remover that is applied to the scalp in this most popular manner. Let us hope you will avail yourself of our offer.

4/- PER DOZ. • SELL'S P.A.T.A. 6 D. PER PKT. • YOUR PROFIT 33 1/3%

CHRISTY'S,
OLD SWAN LANE,
LONDON, E.C.4.

OUR OFFER

to those who reply to this announcement promptly for us to send along a parcel of

6-DOZEN CARTON
QUIN-QUENNA

in attractive double swing-back box supported with a neat little showcard in black and pale blue

POST PAID
PER RETURN

We do not usually pay carriage on so small a quantity, but we are anxious that you should have goods to meet the demand.

Although we anticipated

that our greatly increased advertising campaign would result in a still larger proportion of the general public becoming acquainted with the unrivalled hair-controlling properties of Anzora and so creating an enormous development of our business, it was impossible for us to foresee ALL the difficulties we should have to face in equipping and staffing our new premises.

We hope shortly to be in a position to give prompt attention to ALL orders. Meanwhile

it will pay you to wait

for Anzora, and to resist the specious attempts now being made to foist substitutes for Anzora upon the Chemist and Pharmacist. The demand for these is so small that the makers are in a position to promise immediate delivery from their unsold stocks.

Remember—to supply a customer is one thing—to satisfy him is another. Our vastly increased business is a sterling testimony to the satisfaction we give our customers.



ANZORA PERFUMERY CO.,
28, 32, 34 Willesden Lane, London, N.W. 6.

Salvo Petrolia

the perfection of Petroleum Jelly

in qualities, white, lemon, yellow
and golden, for pharmaceutical
purposes.

MANUFACTURED SOLELY BY

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Packed in barrels, kegs and smaller
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Inquiries are solicited for this article
of **BRITISH MANUFACTURE**, and
buyers may rely that for quality and
price it will meet any competition.

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Samples and prices on application.

"OLEUM DEELINÆ," a certain cure for Eczema.

Phone: 186 Bootle.

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"Lanzone" Lanolin

The Odourless Adeps Lanæ, B.P. Manufactured by
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In a leading article in the "Medical Press" of June 26, 1918, occurs the following:—

"I hope that the same effort will be made to abolish Hun drugs as to get rid of Hun dyes. In one direction I am glad to find that this is being seriously attempted. One of the most important bases for ointments is lanoline. Now the English lanoline which is made by the London Pharmaceutical Refiners, Limited, of Brockley, has the merit of being superior to the old German lanoline. The B.P. allowance of fatty acids is 7, whereas this new English lanoline shows only 27. The new preparation is quite odourless, and acid fats do not develop in it by keeping. These are great merits, and show the extreme care with which the refining process has been carried out by the British refiners."

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ALL GRADES.

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Petroleum Jelly

White, Yellow, Amber,
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Pharmaceutical and
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LIVERPOOL . . . MANCHESTER

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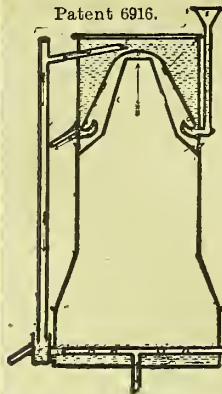
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For producing up to
1 1/2 gallons per hour, 9 gallons per hour.
5 " " 15 " "

Please Inquire for Quotation.

The few most important places we give below afford evidence of the quality, efficiency and economy of the Steam Stills: National Physical Laboratory, 2 in use; Imperial College of Science, 8 in use; University of Wales; Pharmaceutical Society; Guy's Hospital Bacteriological Department; and many of the leading Breweries and Drug Houses, etc. etc. Pamphlets & particulars forwarded on application.

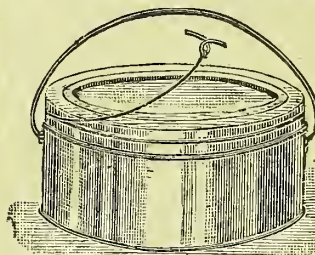
Estimates submitted free if required for supplying and fitting complete.

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Patent Air Tight Slip-lid Tin
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Prompt Deliveries Assured.

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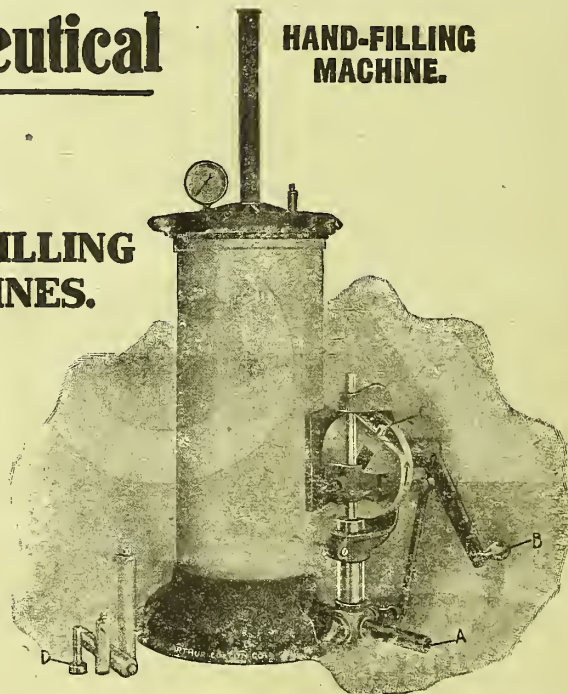
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LISTS FREE ON APPLICATION

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RELIEVES
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Sciatica,
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Stiffness of the Joints,
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Colds, Sore Throats,
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*Full directions for use
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Price 1/3 per bottle.

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PRICE 10/6 DOZ.

Telegrams : "Zotalene, 'Phone, LONDON."
Telephone : EAST HAM 686 (four lines).

Fennel Seed.112 lb. bags, 60/-
per cwt.**Dill Seed.**140 lb. bags, 60/-
per cwt.**Honey.**1 lb. glass jars, in
3 dozen cases at
30/- per dozen.**Finest Honey,**in 2 x 60 lb. tins at
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use, needs no soaking, as it is already
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in ¼ lb. packets at 4/6 per lb., to retail
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65 Crutched Friars, LONDON, E.C. 3.**Greaseproof
Paper.**

2/6 per lb.

**Dried Milk
Powder.**1 cwt. and ½ cwt.
cases at 200/-
per cwt.**Fine Locust
Beans.**2 cwt. bags at 60/-
per cwt.FOR STATUS INQUIRIES, COLLECTION OF ACCOUNTS, AND
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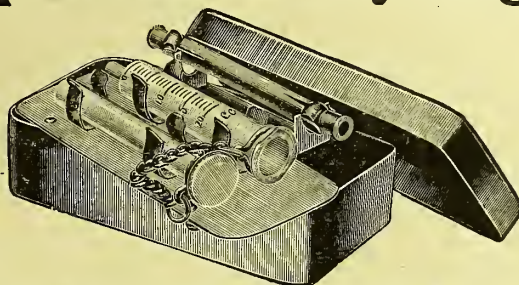
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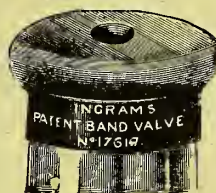
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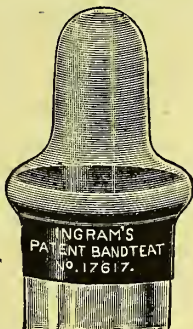
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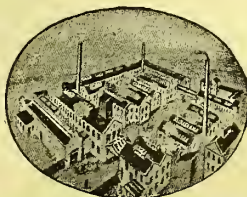
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Coming Events.

This section of the "C. & D." is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

Sunday, July 14.

United Arts Rifles, "D" Company (Pharmacists). At 10 A.M., company parade at Imperial College Union, South Kensington, S.W., for amalgamation with "B" Company. At 10.30, battalion parade. Dress: Drill order. (July 17 and 18, at 3 P.M., platoon parades at Headquarters.)

Tuesday, July 16.

Progressive Pharmacy Club, Arundel Hotel, Victoria Embankment, London, W.C., at 8.30 P.M. Mr. F. Cherry, Ph.C., on "Business Building on Modern Lines."

Wills.

MR. RUFUS DANIEL PULLAR, F.C.S., Braham, Perth, who died on September 22, 1917, left personal estate of the value of 240,440l. 9s. 2d.

MR. HENRY JAMES HELM, F.C.S., F.I.C., 27 Hamilton Road, Bromley, who died on March 25, left property of the value of 9,221l. 19s. 11d.

MR. THOMAS RICHARD LESTER, Ph.C., Maryville, Summerhill, Co. Cork, who died on April 3, left personal property in the United Kingdom valued at 6,276l. 13s. 8d.

European War News.

Personalia.

PRIVATE C. L. POPPLETON, West Yorkshire Regiment, is officially reported missing. Prior to enlistment he was with Taylors' Drug Co., Ltd., Leeds.

PRIVATE R. RICHARDSON, Durham Light Infantry, is officially reported missing. In civil life he was with Reynolds & Branson, Ltd., chemists, Leeds.

PRIVATE WILLIAM SMITH, Highland Light Infantry, has been awarded the Military Medal. In civil life Private Smith was an assistant with Frazer & Green, Ltd., chemists, Glasgow.

PIONEER W. B. DAVIDSON, R.E., is in hospital in England suffering from trench-fever. Prior to enlistment Pioneer Davidson was studying at Duncan's Royal Dispensary and School of Pharmacy, West Richmond Street, Edinburgh.

TROOPER J. T. MORRIS, Dragoons, has been awarded the Military Medal for carrying despatches under fire last April. Prior to joining the Army Trooper Morris was with John Nicholson & Sons, Ltd., manufacturing chemists, Hunslet, Leeds.

SERGEANT A. P. HUMPHREY, Royal West Kent Regiment, who has been officially "missing" since March 23, is a prisoner of war in Germany. Prior to joining the Army Sergeant Humphrey was an assistant with Mr. A. A. Freeman, chemist and druggist, Luton Road, Chatham.

SAPPER DAVID DEWAR COUTTS, R.E., has been awarded the Military Medal. Sapper Coutts is the youngest son of the late Mr. Charles Coutts, chemist and druggist, Aberdeen, and served his apprenticeship in that city. He went out to France with the Gordon Highlanders in February 1915, and was subsequently transferred to the R.E.

CAPTAIN GEORGE WILLIAM HARRIS, R.A.M.C., has been appointed to the charge of medical stores at Salonica, with the acting rank of major. A portrait of Major Harris, who is a Ph.C., appeared in the C. & D., June 22, p. 34. His son, Second Lieutenant G. H. Harris, East Kent Regiment (Buffs), has been gazetted Lieutenant in the King's African Rifles.

Miscellaneous.

ENEMY PATENTS.—British Dyes, Ltd., Huddersfield, are applying for licences to use eleven patents for dyes, belonging to alien enemies. The hearing is to take place at the Patent Office Court on July 17.

ENEMY TRADING.—A new consolidating list containing the names of over three thousand five hundred persons and firms with whom persons in the United Kingdom are forbidden to trade under the Trading with the Enemy (Statutory List) Proclamation has been issued by the Controller of the Foreign Trade Department.

BELGIAN DOCTORS AND PHARMACISTS' RELIEF FUND.—A special appeal is being made at the present time on behalf of this Fund. It will be remembered that the Fund was founded in 1914 for the relief of Belgian medical men and pharmacists who had met with misfortunes at the hands of the Germans. A large sum of money was raised, and has been dispensed in monthly allowances. The Fund now appears to be in need of more money. The Hon. Treasurer is Dr. H. A. Des Vœux, 14 Buckingham Gate, London, S.W.

DEFINITION OF COCAINE.—We have received the following notice from the Home Office: The Home Secretary gives notice that the definition of "cocaine" in Defence of the Realm Regulations 40b (which regulates dealings in cocaine and opium), and in the Proclamation prohibiting the importation of cocaine, has been further amended so as to include ecgonine, its salts and derivatives. The definition now reads as follows: "Cocaine includes ecgonine, and any substance, whether preparation, admixture, extract or otherwise, containing 0.1 per cent. (1 part in 1,000) or more of cocaine or ecgonine or of any salt or derivative thereof."

Business Changes.

MR. GEORGE HEUGHAN, chemist and druggist, Northgate, Dewsbury, has taken new premises at 8 Kingsway.

PORTWAY & Co., chemists, 225 Jamaica Road, London, S.E., have closed their premises in consequence of the expiration of the lease.

MR. JAMES TILSLEY, chemist and druggist, Llanymynech, is relinquishing business. Mr. Tilsley is registered as in business before August 1, 1868.

MR. EUG. FEIGEL, essential oil and drug importer, 38 Rue de Turenne, Paris, announces that he has taken into partnership Miss Lucy Bignon, who has held his proxy, and the firm in future will trade as Eug. Feigel & Co.

B

English and Welsh News.

The Editor would be obliged if subscribers would send him marked copies of newspapers containing items of interest for insertion in this or other news sections of the "C. & D."

Birmingham.

Among the many ladies studying medicine at Birmingham University is Miss Olive Margaret Celia Southall.

Special constables are still wanted here. Several pharmacists have undertaken this work, although their own businesses are being conducted at high pressure.

Colonel W. F. Wyley attended the funeral of the late Mr. A. T. Keane, which took place at Harborne on July 3, as the representative of the London City and Midland Bank and other interests.

Between last Friday and Sunday night Mr. W. Colley, Sherlock Street, sold 5 gals. of tinct. quin. amm. in small quantities. Possibly the fact that there was a rally of 10,000 Boy Scouts at Cannon Hill Park on the Saturday contributed to his rush.

Among recent subscribers to the Y.M.C.A. Hut-fund are Cadbury Bros., Ltd. (500*l.*), Alderman F. C. Clayton (10*l.*), Mr. L. C. Tipper (5*l.*), Mr. A. Southall (2*l.* 2*s.*), and Mr. W. R. Hedges (2*l.* 2*s.*).—Canning & Co. have subscribed 10*l.* 10*s.* to the King Edward Memorial Children's Hospital.

Liverpool.

The election of Mr. L. Moreton Parry as Chairman of the Pharmaceutical Society's Benevolent Fund has given great satisfaction in Liverpool.

Oil of anise, wherewith to bait a rat-trap, was the sole article demanded by the solitary customer of a central-area pharmacist during a recent Sunday evening hour of opening.

Mr. Ralph G. Govier, the energetic and popular Hon. Secretary of the Wallasey Chemical Association, has won high praise by his assiduity in regard to the Military Service procedure and the interests of pharmacy.

Mr. G. R. Tharratt has had as his guest a son of Captain R. C. Cowley (of Brisbane, formerly Principal of the Liverpool School of Pharmacy), a young officer of the Australian Force. Captain Cowley was the subject of a personal note in the *C. & D.*, 1917, p. 229.

Manchester.

Manchester chemists, especially those who are on the panel, are having "the time of their lives," and are feeling the strain very much. In several districts queues have been seen outside pharmacies, and one or two shops have closed till dispensing was finished. Doctors being totally unable to cope with the number of patients, the well-tried remedies of the chemist have been invoked. In one instance a harassed *locum*, who had two assistants away with "flu," had to wire for the proprietor to return at once from his holiday.

Mr. Harry Kemp, pharmacist, Chorlton-cum-Hardy, has retired from business and gone to live at Old Colwyn, N. Wales. His innumerable friends will wish him long life and happiness in his well-earned retirement. Very few pharmacists have served the interests of their fellow-craftsmen more ably than Mr. Kemp. Many will remember his invaluable services to Manchester pharmacists in connection with the National Insurance Act. He was instrumental in paving a comparatively smooth passage for those who follow him.

We are still afflicted with the influenza epidemic, writes a Salford correspondent, but it shows signs of abating. The demand for quinine and cinnamon in various forms, fever-cures, cough-mixtures, throat lozenges and pastilles, has been enormous. Many of the doctors have queues outside their surgeries, and the more commonly prescribed drugs have been quinine, ammon. carb., squill, vin. ipecac., tr. camph. co., liq. ammon. acet., chlorodyne, sodii salicyl., and sp. aeth. nit. Young girls and children have been suffering most on this occasion, with the result that all the elementary schools in the borough are closed for at least a fortnight. Several chemists have had to stay in bed for two or three days, mostly Grade 1 men, while the older men have stood the strain well.

Sheffield.

Mr. D. Charlton (Eardley & Furnival, Glossop Road) has joined the Artists Rifles Corps.

The prices of saccharin tablets in the East-end establishments have been reduced by 3*d.* per hundred.

A prominent pharmacist has remarked that he does not think chemists were ever doing better than they are to-day, especially in the industrial districts of the city.

Influenza has caused an anxious time to local pharmacists: queues have been quite a common sight. Chemists who have been in the habit of buying their tinct. quin. amm. have been very much handicapped.

Miscellaneous.

DRUG-WORKS FATALITY.—Evidence given at an inquest into the death of Percy H. Taylor (14), Kent Street, Plaistow, London, E., who died in hospital on June 25, showed that the lad, in the course of his employment at the Portway Drug-works (proprietor, Mr. H. G. Jones), was assisting in transferring ethyl chloride from one drum into another when the contents of the funnel went over his clothes and caught fire. The jury returned a verdict of "Death from lobar pneumonia, accelerated by the scalds," and expressed the opinion that more care ought to be taken in the factory.

POISONINGS.—A Buckinghamshire Coroner's jury returned a verdict of "Death by misadventure," on July 10, in the case of Alexander Miller, an R.A.F. cadet, who had contracted influenza and was given carbolic acid in mistake for quinine. The evidence showed that a lady V.A.D. worker applied at the dispensary for some carbolic acid with which to make a mouth-wash, and was given some in a bottle which had been used for quinine. The jury urged that a qualified person should in future be attached to the dispensary to see that medicines were properly dispensed.—At a Brentwood inquest, on July 5, on Archibald Lee, an inmate of the Essex County Asylum, who died on returning from a walk in the grounds, Dr. Bernard Dyer said that death was due to poisoning by delphinium plants. It was stated that last year two patients died after eating hollyhocks.—A verdict of "Death from misadventure" was returned at an inquest held at Burton-on-Trent, on July 5, on the body of Ethel E. Wood, who took lyso.

METROPOLITAN POOR-LAW SERVICE.—The Local Government Board have stated in a communication to the Poor-law Section of the Public Pharmacists' Association that with regard to dispensers in the Metropolitan area of the Poor-law Service "the Board would be willing that the increments under the present scale should be at the rate of 10*l.* every two years from the date of appointment, and that the maximum of 200*l.* now allowed in special cases should be reached by increments in the ordinary course." The small concessions made will be appreciated. Formerly the ordinary maximum salary was 180*l.*, a maximum of 200*l.* being obtainable only if long service and special circumstances could be shown. These are not now required. A dispenser may obtain an increment of 10*l.* after the first two years' service and after each subsequent two years' service until the maximum is reached, instead of the former scale of increments—viz., 20*l.* after the first four years' service, and 10*l.* after each subsequent two years' service until the maximum was obtained. Dispensers in the Metropolitan area of the Poor-law Service desiring to be placed under the new conditions indicated should make application to their Dispensary Committees and Boards of Guardians.

IN THE COURTS.—At Clerkenwell Police Court, on July 6, two men named Ni Yung and Chong Chung, giving addresses at Limehouse, were charged under Regulation 40*b* (issued under the Defence of the Realm Act) with the unauthorised possession of opium. Evidence having been given that the prisoners, stopped on alighting from a Glasgow train, were found to be carrying opium in 4-oz. quantities, in pellets and otherwise, to the value of 250*l.*, they were remanded.—At Mistley, on July 8, Robert J. Bloomfield (17) was remanded on a charge of stealing from the shop of Mr. C. Bayley, chemist, Frinton, 231 tablets of soap, forty bottles of perfume, and other articles.—At Old Street Police Court, London, on July 6, William Hopkins (68), who had been employed in the warehouse of Sutton & Co., wholesale chemists, 76 Chiswell Street, London, E.C., was charged with stealing from the premises seven packets of Icilma cream, three bottles of dentifrice, six tubes of pomade, three jars of Mason's Extract, two packets of Vinolia cream, and other articles, the goods of Messrs. Sutton. The prisoner seemed a weak and pathetic figure in the dock, and according to a medical certificate handed in he was "childish from senile changes." Detective-Sergeant Foley, giving evidence, said the prisoner, in consequence of many losses from the stock, which had led to the suspension and searching of many other employes, was stopped as he left the premises on June 28, and owned that he had taken a few articles home. The prisoner's wife was called forward and asked what steps she could take to look after her husband, but seemed unable to suggest any. He was obstinate, she said, and she could not control him; but she agreed to do her best to look after him. On that understanding the Magistrate adjourned the case for four weeks.

Irish News.

Brevities.

Permission to rebuild the burned portion of the Cork Chemical and Drug Co.'s premises has again been refused.

Sir Charles Cameron has written to the Press urging that pharmaceutical establishments should remain open for longer hours during the present influenza epidemic.

Captain A. H. Murray, Royal Dublin Fusiliers, son-in-law of Mr. Lancashire, Ph.C., Ballymena, has been appointed the Assistant-Secretary of the Belfast War Pensions Committee.

Notice of motion was handed in at the last meeting of the Cork Board of Guardians that Mr. E. M. McSwiney, chemist, in the employment of the Board, be granted an additional war bonus.

Miss Connie Lancashire, daughter of Mr. Huston Lancashire, J.P., Ph.C., Ballymena, unveiled a memorial banner in that town last week in connection with an Orange Lodge to perpetuate the men of the Ulster Division who fell in the battle of the Somme on July 1, 1916.

The influenza epidemic in Belfast shows signs of abating, but chemists are still exceptionally busy selling prophylactics, such as quinine. The number of deaths from pneumonia for the week ended June 29 was ninety-two. The majority of these had their origin in influenza.

The Committee of Management of the Cork South Infirmary has gone into the question of the increased cost of the surgical department of the institution, and traced the increase to the cost of surgical appliances and drugs. The Committee called on the doctors for an explanation, and the doctors reported that if the efficiency of the institution is to be maintained the supply and quantity of these materials should not be cut down.

Robert Haynes, a messenger formerly employed by T. R. Lester, Ltd., chemists, King Street, Cork, was charged with having stolen a cash-box and some papers from Messrs. Lester. The evidence alleged that the boy broke a window in the shop and thus entered the premises. Mr. Yates, Ph.C., the manager, gave evidence that 2*l.* in money and some papers were missing. Two witnesses who saw a lad enter the premises said they could not identify Haynes as the culprit, and the case was dismissed.

At the Galway Quarter Sessions on July 1, Mrs. P. J. Devane, Medical Hall, Ballinasloe, claimed 58*l.*, compensation for loss of drugs due to an explosion of gas, and for the cost of repairs rendered necessary by the explosion. The Urban Council were the defendants. Mr. Joseph Walsh, Ph.C., plaintiff's manager, gave evidence as to the damage caused by the explosion, and when recalled stated that the glass of one of the cases broke a week after the explosion. His Honour gave a decree for 47*l.*

At the Dublin Police Courts on July 5, before Mr. Drury, K.C., Mr. Thomas W. Campion, Ph.C., Commercial Buildings, Clontarf, was prosecuted by the police for failing to enter in the prescribed form records of the sale of cocaine by him. Defendant said he was not aware there was a special record to be kept. He had duly entered the sales in the register provided for the purpose. The Magistrate said the defendant had done the next best thing to complying with the regulations. At the most he was guilty of a technical offence, and the justice of the case would be met by a fine of 1*s.*

A deputation representing the Association of Wholesale Grocers, Druggists, and Drysalters of Ireland was introduced to the Ministry of Food in London on July 3 by Mr. W. A. Lindsay, M.P. for South Belfast. The sum of the deputation's requests was that there should be as little interruption as possible of the ordinary channels of trade, and that those engaged in it should receive a reasonable reward for their services. To this end certain suggestions were put forward, and these were favourably received by the officials. One point pressed was that the arrangement forbidding purchases from Government brokers should be modified, and it is understood that this will be done.

The early-closing order under the Shops Act made by the Corporation of Belfast on May 1, and confirmed by the Lord Lieutenant on June 29, came into force on July 5. It is known as the Belfast Shops Early Closing Order (No. 5), and relates to pharmaceutical chemists', chemists' and druggists', and registered druggists' shops. The closing hours laid down are 9 p.m. every day except Saturday, when the hour is 10.30 p.m. Nothing in the Order affects the obligation of every occupier to close his shop at 1.30 p.m. on Wednesday or Saturday in each week for the weekly half-holiday, in accordance with the Half-holiday Order made under the Shops Act. The sale of medicines and medical and surgical appliances after the closing hours is not prohibited by the Order.

Scottish News.

Brevities.

Visitors are numerous on the East coast and in the adjacent districts and business there is good.

A whale recently brought into a Scottish port has been purchased by a firm of chemical and oil manufacturers at the rate of 6*l.* a ton.

At a meeting of the West Perthshire District Committee on July 6, it was reported that the net cost of the rat-destruction scheme amounted to 204*l.*, and that during the first year 100,000 rats were killed. It was agreed to renew the scheme.

The use of sulphuric acid or nitre-cake is recommended for the destruction of weeds, especially charlock or runch. Sulphuric acid is used as a spray of 5-per-cent. strength, and the cost per acre sprayed is about 2*s.* 6*d.* Nitre-cake should be used in a 15-per-cent. solution, also as a spray, the cost being only a few pence per acre. Experiments have been carried out by Professor R. H. Leitch, of the West of Scotland Agricultural College, with highly satisfactory results. In view of the high price of copper sulphate the matter is worthy of attention from rural chemists.

Dundee.

Two dozen medicine-stamps were lost in a Dundee street recently, states an advertisement in the local Press.

"Royal" Vinolia goods have been on sale in a hardware shop at prices less than those fixed by the makers.

Edinburgh.

A lady who desired a copy of an old prescription the other day brought the chemist a sheet of notepaper and an envelope.

"The busiest week since I started business," says a pharmacist of twenty-five years' standing, referring to the influenza epidemic.

Glasgow.

Glasgow's British Industries Fair is to open on August 19 in the new building specially built for the purpose.

George Walker & Son, Ltd., manufacturing chemists, Bridgeton, have presented a large supply of "Eusaline" to the "Evening Times" comforts bureau for soldiers and sailors.

Legal Report.

Honey Contract.—In the City of London Court on July 5, before Sir John Paget, K.C., A. W. Gamage, Ltd., 128 Holborn, London, E.C., claimed 100*l.* against Mr. N. L. Sclaris, merchant, 39 Botolph Lane, E.C., and Henry Mason & Co., Ltd., 21 Mincing Lane, E.C., as damages for breach of contract for non-delivery of 360 dozen cases of English meadow honey at 1*s.* 6*d.* per doz. The goods were not delivered, and since then the price had advanced, plaintiffs' claim being for the difference. The second defendant, to whom Sclaris handed the order, would not deliver the goods until a cheque was sent, but plaintiff contended that the terms "for net cash" meant payment without discount, and has no reference to the time of payment. Mr. Edwin Watts, managing director of the Standard Health Food Co., Ltd., Reading, gave evidence as to the rise in price of honey. Mr. Thomas, for Mr. Sclaris, submitted there was no case against his client, as the parties were never *ad idem* with regard to payment against delivery order. Mr. Snell urged that Mason & Co. could not be made liable as agents of Sclaris. The Deputy-Judge said he would hear the evidence. Mr. Sclaris said he bought the honey in dispute from Messrs. Mason for delivery within three or four weeks. He was under the impression he could get prompt delivery. He paid 272*l.* for the honey, so there was no question about him having been the owner of it. He sent the bill to Mr. Gamage to accept, and when he refused it he resold the honey, because he considered he was perfectly entitled to do so. Incidentally, he obtained 27*l.* for it more than he would have received from Mr. Gamage. The further hearing was adjourned.

CHEMICALS AND BY-PRODUCTS, LTD. (P.C.).—Capital 75,000*l.* Objects: To take over from W. F. Cooper, of the Cooper Laboratory for Economic Research, Watford, the freehold land and premises known as the "Cooper Laboratory," Watford, to engage in chemical research, to manufacture and deal in synthetic and other chemical substances and by-products, etc. Solicitors: Chamberlayne, Hacking & Co., 45 Parliament Street, London, S.W.

British Pharmaceutical Conference.

Fifty-fifth Annual and Fourth War Meeting, London, July 10, 1918.

THE Conference was held on July 10 at 17 Bloomsbury Square, London. Mr. C. A. Hill, B.Sc., F.I.C., the President, occupied the chair, and the following members signed the register or were observed to be present:

Messrs. C. T. Allen (London), A. P. Atkinson, R. R. Bennett (Hon. General Secretary), E. T. Brewis, W. Browne, A. T. Cholerton (Leicester), F. W. Crossley Holland, W. L. Currie (President of the Pharmaceutical Society), H. Dean (Long Milford), J. B. Francis (Wrexham), H. Wippell Gadd (Exeter), J. P. Gilmour, C. H. Hampshire, T. L. Hewitt, D. Lloyd Howard (Hon. Treasurer), W. L. Howie, A. H. Jenkin, W. S. Glyn-Jones, M.P. (Secretary Pharmaceutical Society), D. Humphreys Jones (Liverpool), T. H. W. Idris, A. R. Keith, G. J. Knight, Wm. Kirkby (Manchester), T. E. Lescher, I. T. Lloyd, T. Mabon, A. Macdonald, A. E.



MR. CHARLES ALEXANDER HILL

was born in 1874 and educated at Winchester College. Studied at the School of Pharmacy of the Pharmaceutical Society, and became a pharmaceutical chemist in 1896. Thereafter took special courses at St. Thomas's Hospital and King's College, passed the examinations of the Institute of Chemistry, and graduated B.Sc. of the London University. Has contributed many papers on pharmaceutical subjects, his special subject being the metallic impurities of chemicals. He is managing director of The British Drug Houses, Ltd., wholesale druggists and manufacturing chemists, and has filled offices in numerous public bodies connected with pharmacy and chemistry.

Marsh (Leicester), J. H. Mather (Godalming), A. R. Melhuish, W. A. H. Naylor, C. A. Noble, A. G. Parkes, A. J. Pidd (Manchester), F. Ranson (Hitchin), P. F. Rowsell (Exeter), W. H. Saunders (Liverpool), P. A. W. Self, H. Skinner, A. H. Solomon (Kew Gardens), F. Southern (Exeter), J. O. Thomas (London), G. A. Tocher, W. B. Trick, W. P. Want, H. S. Watson, H. C. Wright, and A. Wright (Palmer's Green).

WELCOMING THE CONFERENCE.

Mr. W. L. CURRIE, President of the Pharmaceutical Society, said that he regarded it as a privilege and a pleasure to welcome members of the Conference. It always afforded the Council of the Society the greatest satisfaction to place the rooms of the Society at the disposal of any meeting of chemists. It was peculiarly fitting that the British Pharmaceutical Conference should meet there since the majority of its members had received their education in that building. It must be a source of gratification to all of them that they could return and impart to others their

experience. It was a matter of regret to all concerned that the proceedings of the Conference had to be limited and contracted at present. Members in London certainly did miss the social functions associated with the annual Conference. It was the earnest hope of all interested in the Conference that before another year came round they would be able to meet in some other place besides London, and there enjoy the benefits which were derivable from fellowship with pharmacists from all parts. (Applause.) On behalf of and in the name of the Council of the Society he welcomed the members, and hoped they would have a pleasant and profitable meeting.

THE PRESIDENT OF THE CONFERENCE acknowledged what he described as the graceful welcome which had been extended to members by the President of the Society. He expressed the hope that the cordial relations which had existed between the Society and the Conference would long continue, and that when the Conference again met in London its members would continue to enjoy the pleasant co-operation of the Society. The business on that occasion was purely formal. He called upon the Secretary to read the apologies for absence.

APOLOGIES FOR ABSENCE.

THE HON. GENERAL SECRETARY (Mr. R. R. Bennett) intimated that apologies for absence had been received from the following: Mr. J. Michie (President of the Pharmaceutical Society of Ireland), Mr. W. Giles, J.P. (Chairman of Executive, N.B. Branch of the Pharmaceutical Society), Mr. W. F. Wells (Dublin), Mr. A. McMillan (Glasgow), Dr. David Hooper, Mr. W. P. Evans, Sir Thomas Barclay, Mr. F. W. Gamble, Captain H. Finemore, Mr. J. Rutherford Hill, Mr. J. R. Reith, and Mr. A. N. Kennard. The Secretary also read a list of the delegates from various organisations who had been appointed to attend the annual meeting of the Conference.

PHARMACY AFTER FOUR YEARS OF WAR.

THE PRESIDENT began by referring to his address at the Conference last year, in which he dealt with the problem of maintaining an adequate supply of medicines in wartime. The control of materials by the Government, which was a feature of the position last year, has been widely extended, and includes not only drugs and chemicals, but materials such as coal, paper, tinplate, glassware, and materials for plant. If the Government assumes control of a material, said the President, it should secure and allot supplies of that material to essential industries dependent on it, which has not always been the case within the last four years. The Drugs and Chemicals (Returns) Order, 1918, collected particulars of 112 articles, the primary object being to secure supplies for the Army, but doubtless also the intention was to obtain information as to general national requirements. The freight and insurance question has been the ruling factor in the shortage of supply, an illustration used being that of a consignment of Mexican scammony-root, valued at 1,000*l.* f.o.b., upon which the freight and charges were 1,800*l.* Particulars were then given regarding a number of vegetable drugs, the stocks of some of which are approaching exhaustion and cannot be replaced without Government assistance:

ACACIA GUM.—Parcels from the Sudan have been coming forward fairly well, and prices have not risen to any extent.

AMMOIACUM.—Old stocks have met all requirements so far, but no fresh imports have made their appearance.

ARCEA-NUTS.—Very scarce and dear on this side. There are believed to be plentiful stocks on the other side, but permission to ship has been refused.

ASAFFETIDA.—Almost a famine prevails in this article, as with most others from the Persian Gulf.

BELLADONNA.—English growers are now providing nearly enough to meet all our requirements. Indian and Japanese roots have been shipped to this market with a view to replacing the former Austrian supply.

BENZOIN.—Both Siam and Sumatra are in very short supply. Every parcel which arrives realises extravagant prices.

BUCHU.—Stocks on this side are kept low by small shipments from the Cape. The prices realised are exorbitant. Freight difficulties are put forward as the cause of the small shipments.

CALUMBA-ROOT.—There is at present a famine in this drug. Consignments which would in pre-war days have been considered dear at 17*s.* per cwt. have recently been eagerly competed for up to 22*s.* per cwt.

CHAMOMILES.—English growers do not seem to increase their output, and in the absence of the usual Belgian supplies we have had to fall back on the French growers, who have increased their ideas of value accordingly.

CANNABIS INDICA.—Owing to the action of the Indian Govern-

ment, Bombay tops are getting very scarce and dear, but fair quantities of really good samples from the Cape are forthcoming which relieve the situation and answer well for some unofficial purposes.

CARAWAY SEEDS.—The Dutch Government prohibits the export, so that our only source of supply, beyond the small amount of English grown, has been Morocco.

CARDAMOMS.—In the absence of Continental buyers, sales are difficult and prices rule normal.

CASCARA SAGRADA.—Owing to the bulky nature of this drug the shipping difficulty comes in. Stocks in this country were large, but have steadily diminished during the war, and the price is advancing equally steadily.

CASCARILLA.—Supplies have reached this market spasmodically, and prices have not greatly advanced.

CINEHONA.—Owing to the small shipments prices here have gradually advanced.

COLECHICUM.—English collectors now make us independent of imports both as regards corn and seeds.

COLOCYNTH.—The old Levant or Turkey colocynth is now never met with, but sufficient Egyptian and Spanish comes to hand to meet all requirements.

CUBES.—The supply is ample, yet the price has doubled during the war.

DIGITALIS.—As with colechicum, English growers can now meet all our wants.

EGOR.—The pre-war stocks are, of course, long since exhausted. With little coming from Russia, we are now dependent upon Spain and Portugal.

EUPHORBUM.—At the moment unobtainable. Supplies of this drug, however, have always been spasmodic.

GALBANUM.—This, a Persian Gulf drug, is now unobtainable.

GALLS.—The variety known as Aleppo galls is almost unobtainable, but fair parcels of China galls have come to hand.

GENTIAN.—The pre-war supplies were chiefly of Austrian origin. Spanish and French roots are now available, but at very high prices.

GRAINS OF PARADISE.—The market is bare of this drug. Supplies formerly were irregular, but now they seem to have stopped altogether.

HONEY.—The freight question bears strongly on this line, but cannot be held entirely responsible for the extremely high prices now ruling, which are largely due to the keen competition from the packers and Italian warehousemen, in consequence of which wholesale druggists have difficulty in securing stocks for pharmaceutical manufacturing.

HYOSCYAMUS.—English henbane has always been nearly sufficient for all our requirements. Egyptian henbane (*Hyoscyamus muticus*) in pressed bales has been reaching this country in fair supply for the manufacture of atropine, which is now produced here in increased quantities.

JALAP.—There is a shortage of this drug. The occasional parcels of Mexican tubers which reach this market serve for the manufacture of jalapin. The price has quadrupled during the war.

LINSEED.—This is controlled; high prices rule in consequence.

LIQURICE-ROOT.—In pre-war days the common natural root came from Central Asia, being shipped from the Persian Gulf, and the scraped root came from South Russia; both these sources have been cut off. For some time a fair quantity of Sicilian root of various grades reached this country, but now that source of supply also has become cut off. Spanish root is now the only kind procurable, and recent consignments which have reached this country have been of very low quality indeed. Notwithstanding its inferior nature, the present price of liquorice-root is some fourteen times as great as the pre-war value.

MANNA.—Parcels of the new crop have arrived safely; freight and charges add about 2s. per lb. to the cost here.

MYRRH.—A Persian Gulf article and very scarce. Ordinary Aden "sorts" now fetch 12l. 10s. per cwt., as against 70s. pre-war value.

OPUM.—The different varieties of Turkey and Smyrna opium have been unobtainable since the pre-war stocks became used up. Occasional parcels of Salonica opium have come through. Persian opium, however, has been in plentiful supply, and, although this is of lower alkaloidal strength, it has met all druggists' requirements. Indian opium of still lower percentage has been available for the manufacture of morphine. The present value of opium is 6s. 3d. a unit, as compared with 2s. a unit before the war.

POPPY-HEADS.—The English supply is sufficient for the poppy-heads sold wholesale as such, but we miss the former Dutch and Belgian supplies.

RHUBARB.—Although acute shortage has frequently been threatened, stocks have been just about sufficient to meet requirements.

SARSAPARILLA.—Consignments of the different varieties of this drug arrive spasmodically. Owing to its bulky nature, shipping space can seldom be secured. All kinds command within a few pence the same price.

SENA (LEAVES AND PODS).—Alexandrian: An acute shortage of both leaves and pods existed for some time owing to the difficulty in securing freight, and extreme prices ruled in consequence. The position has since improved somewhat. Tinnevely: There are considerable stocks in this country, but the quality leaves much to be desired. Any really good parcel which reaches the market is keenly competed for, and extravagant prices are realised.

TOLU BALSAM.—The shipping difficulty is answerable for the shortage of supply and consequent high prices.

TURMERIC.—The markets are bare of all grades, and nothing appears to be coming forward; high prices rule in consequence.

The following drugs from enemy countries are quite unobtainable:

Austria.—Uva-ursi, storax, hellebore, stramonium (limited quantity of English to be had).

Germany.—Aetæa racemosa.

Turkey.—Turkey tragacanth, Turkey opium, scammony.

Bulgaria.—Otto of rose.

Referring then to the drugs which have gone out of use, or nearly so, the chief are glycerin, lard, and castor oil.

THE USES OF GLYCERIN.

Glycerin is essential for the preparation of glyceryl-compounds, such as glycerophosphates and glyceryl borate (glycerin. acid. borie. and boroglycerin). Its various properties, possessed by no other known substance, render it a necessary ingredient in a large number of pharmaceutical preparations. Among its chief uses in this direction may be mentioned the following:

1. As a basis for glycerin suppositories.
2. As a basis for many pessaries and bougies. In this connection mention may be made of glycerin preparations (e.g., glycerin. ichthamolis) in tampons.
3. To prevent hardening, as in the gelatin base for capsules and in Unna's dressing.
4. To prevent drying, as in cataplasma kaolini and in lotio calaminae.
5. To increase viscosity and so prevent separation, as in glycerin. bismuth. carb. and in emulsion of iodoform.
6. As a solvent. The solvent uses of glycerin in pharmacy are many; as an extractive solvent in such preparations as ext. cinchonae liq., ext. krameriae liq.; as a plain solvent for substances which are not sufficiently soluble in other solvents—e.g., glycerin. acid. carbolie., glycerin. aluminis, glycerin. hydrarg. perchlor., and glycerin. plumbi subacet. The solvent properties of glycerin and alcohol together in many cases are superior to those of either solvent alone. Glycerin acts both as a solvent and preservative in the so-called glycerinated tinctures, and in such preparations as glycerin of pepsin, glycerin of papain, and glycerin of pancreatin.

There is no true substitute for glycerin as a demulcent, nor is there anything to replace it for its physical effect on mucous and skin surfaces. Its extreme usefulness in throat-affections approximates to the essential.

OILS AND FATS.

Consideration of the national food-supply has resulted in pharmacy being deprived of edible fats and oils, most of these being required for the manufacture of margarine.

Lard has practically disappeared from pharmacy, and one must assume for the period of the war, the whole supply being taken by the Government for food-purposes. It is interesting to compare the official uses of lard in the B.P. 1914 (as published) with those of the B.P. 1867, compiled when medicinal paraffins had not been introduced. In the 1867 volume we find thirty-four ointments, of which twenty-eight were directed to be made with a lard basis and six with wax and oils. In the 1914 edition there were forty-three ointments; the formulae of twenty-five of these have lard as a basis, while the remaining eighteen are chiefly paraffin-base ointments.

Olive oil, so far as regards the higher grades as used for edible purposes, is no longer an article of commerce in pharmacy, but the ordinary grades are available for pharmaceutical manufacturing, though supplies have to be supplemented by other oils, notably sesame or gingelly-seed oil. Olive-oil soaps seem to be no longer imported, so that *sapo dur.*, B.P., is unobtainable; and while supplies of B.P. soft soap have not failed altogether, commercial soft soap as used for general domestic purposes is made from fish-oils, which fact explains why occasionally everything in the home smells and tastes "fishy."

Linseed oil is still available.

Castor Oil.—The position here is that none is available for medicinal purposes, except the product known as "neutralised seconds." Which of us ten years ago would have believed that such an important and everyday drug as medicinal castor oil would have become in our time unobtainable?

In place of the foregoing glycerides there are available for the manufacture of the ointments, liniments, plasters, and other preparations affected, lanolin—now a British product—and hard, soft, and liquid paraffins.

Modified ointments made with lanolin and paraffin bases have been in use in pharmacy already for at least six months, and such modifications were regularised in respect of official preparations by the action of the G.M.C. in publishing on March 29 an "Alteration and Amendment" and "Schedule" to the British Pharmacopœia.

Efforts have been made to standardise the modified ointment-bases, but so far no publication has resulted from a conference held several months ago.

SUGAR AND SACCHARIN.

With a view of economising sugar where it is used merely for sweetening-purposes, Government saccharin tablets have been introduced. The substance saccharin has recently caused, relatively to its importance, a record amount of annoyance to both wholesale and retail pharmacists, through the operation of the principle, well known in

political economy in other directions, of everyone wanting to buy the same thing at the same time. The article being Government controlled, there is no safety-valve, such as would be provided by the law of supply and demand, in the form of an increased price. The result, instead of inflated prices, has been considerable irritation. In connection with the argument advanced last year that sugar does not lose its food value by reason of its incorporation into a medicinal preparation, it is interesting to record the reply given by the French Government to the British Government, in answer to an inquiry as to the reasons which had led to the ban on saccharin in foodstuffs in France. This was to the effect that where sugar enters into an article for other than mere sweetening purposes it was not considered desirable in the public interest that it should be omitted and its place taken by some less useful substitute *plus* the small quantity of saccharin necessary for sweetening purposes.

SPIRIT.

Since we last met there has happened an event of importance, the 1918 Budget—which claims our attention to-day by reason of the fact that the enormous addition which was made to the spirit-duty was, so soon as made, remitted in favour of medicines. It is yet too early to speak from experience, but there is no reason to suppose otherwise than that the rebate will work very much as has happened during the past three years, when the surtax of 1s. 6d. per proof gal. imposed on immature spirit by the Finance Act, 1915, has been remitted in favour of spirit “used solely in the manufacture or preparation of any article recognised by the Commissioners of Customs and Excise as an article used for medical purposes.” The fact is of importance to pharmacy because of the Government recognition manifested. The fact is of importance to the Nation, because if the rebate had not been given, not only would all connected with pharmacy be prejudiced, but the national health would undoubtedly suffer. It is therefore not merely a financial matter; very expensive spirituous medicines are apt to lead to the use of cheaper and less efficient substitutes, to the detriment of the national health.

MEDICAL AND SURGICAL PRACTICE.

The President then dealt with drugs as used in medical and surgical practice, mentioning, in the group of anaesthetics, the extended use of nitrous oxide and oxygen and the alkaloids employed in connection with “twilight sleep.” Novocain and cocaine are now manufactured in this country. In the antiseptics group were mentioned the wound-disinfectants, such as eusol, Dakin's solution, Carrel-Dakin solution, chloramine, dichloramine, halazone, acriflavine, brilliant green, No. 7 paraffin, and B.I.P. The remedies employed in the treatment of venereal diseases were reviewed—salvarsan, neo-salvarsan, galyol, intramine, colloidal metals, and bismuth subgallate and tribrom-phenol.

SYNTHETIC CHEMICALS.

Finally, the President dealt with the manufacture of the synthetic chemicals, which before the war came chiefly from Germany. Despite war conditions, some progress has been made, and two facts of primary importance do seem at length to have been realised: (1) That one cannot expect to build up in a short time and under war conditions an industry which it has taken Germany's resources two generations to develop; (2) that this industry is dependent on the dye-industry. In the latter industry there are necessarily produced in large quantities a number of chemicals known in the trade as “intermediates.” These “intermediates” are starting-points or stepping-stones in the manufacture of synthetic drugs. The fine-chemical industry must go hand in hand with the dye-industry, and be worked systematically and on a large scale if it is to be made a national industry which can overtake the enormous start that Germany has. If the fine-chemical industry is to be developed in this country on a scale anything like commensurate with its importance (and it must be borne in mind that it is a key industry, and therefore of paramount importance to the general development of national industry), Government assistance at the conclusion of hostilities will for a time be absolutely essential.

A further necessity is a supply of trained men. Professor Pope in his recent presidential address to the Chemical Society referred to the shortage of young trained chemists, which would be our difficulty after the war. We have also to produce chemical technologists. Every encouragement should be given to our most promising University graduates to continue their training and convert themselves into thorough technologists, with a view of entering chemical industry, and every appreciation and support should be given to those who are making efforts in this direction. In

this connection the scheme now being initiated by the Salters' Company is especially noteworthy.

In pharmacy we require pharmaceutical technologists—a class very rare in this country. Should not something be done in the way of post-graduate training, on terms to attract the best men, for the production of first-rate pharmaceutical technologists? They will be required in the future if British pharmacy is to be in the forefront. Concluding, the President said: Last year, when I had the honour to address you, I urged that machinery should be set up by which pharmacy should be able to speak with one voice to any Government Department, to Parliament, and to the public, and suggested that the Pharmaceutical Society should set up a Public Policy Council, on which every side of pharmacy should receive representation proportionate to the merits and magnitude of the interests concerned. Professor Pope, in his admirable address to the Chemical Society, makes a very similar proposal on behalf of chemistry. He advocates that the various bodies representing their respective sections of chemical activity “should set up a watchful and alert joint Council, with directions to consider national questions in which any of the varied interests of chemistry are concerned, and to make such representations to our administrators as would voice the corporate view of the joint body.” This important suggestion has not fallen upon deaf ears, for steps are already being taken with a view to carrying it into effect. When we reflect upon the many problems which confront pharmacy after the war, both internal and external to this country and this Empire, does it not seem desirable that those whose livelihood is bound up with pharmacy should join hands for their common good? The Council of the Pharmaceutical Society does, on occasion, call in representatives of the manufacturers in a consultative capacity; but this does not meet the case. It seems impossible sometimes to get a thing done without repeated exhortation. At the risk of being irksome, I must repeat my plaint that the main interests of the two sections into which pharmacy is divided—retail and wholesale—are essentially common interests, and that both sections will benefit by fighting, not each other, but their common adversaries. The future of pharmacy, I believe, is dependent to a not inconsiderable extent on the realisation of this principle; not only now, but after peace has come—and may that be not far distant.

VOTE OF THANKS TO PRESIDENT.

Mr. F. RANSOME remarked that he believed he had the honour five years ago of proposing Mr. Hill's election as President of the Conference. He was of opinion now that the Conference might be congratulated on having accepted his proposal. The President had delivered an eminently useful and practical address. Although at times like the present they must all agree that every consideration must be subordinated to the necessity for winning the war, there were certain aspects relating to war-time conditions which were of the utmost importance. As the President had shown there were requirements connected with pharmacy which were as essential in national interest actually as providing for our Army the necessary arms, weapons, and munitions. It was essential that the health of the Army and the civil population should be maintained, and in that connection there were points which seemed rather to have been neglected and overlooked by those in authority. Perhaps the most important of these related to the supply of glycerin. (Hear, hear.) It was now impossible to obtain supplies of that article, and yet, as the President had shown, it was one of the most essential of drugs. It was satisfactory to note from the President's address that we are no longer dependent upon Germany for our supplies, however much we might have been so before the war. Surely the resources of the British Empire would suffice for the supply of all vegetable and other drugs that are required. The National Council to which the President had referred as being formed should be eminently useful in promoting the interests of pharmacy after the war.

Mr. T. H. W. IDRIS, in seconding the resolution, complimented the President on the excellence of his paper, which he said was of great interest and importance to every pharmacist. The knowledge and recommendations which it contained were of the greatest value, and were just what were required.

The proposition was unanimously carried.

EXECUTIVE COMMITTEE'S REPORT.

After expressing the thanks of the Conference to the pharmacists of Liverpool for having provisionally invited the members of the Conference to meet in Liverpool, and explaining the reason for the decision to hold the Conference in London, the interesting announcement was made that a gift had been made of Consols to the nominal value of 1,250*l.*, to be held in trust. The Executive are given

full discretion to use the interest in any way they may consider to be for the benefit of pharmacy. The donor of this munificent gift, who is an "1864" member, desires to remain anonymous. The losses by death have been heavy, and the list includes Mr. Thomas Tyrer (Stratford), President of the Conference in 1907; Sir Edward Evans (Liverpool), President of the Conference in 1912; Mr. G. S. Woolley (Manchester), Vice-President of the Conference in 1887 and in 1907; Professor J. P. Remington (Philadelphia), an honorary member; Mr. J. Baxter (Ballymoney); Mr. J. E. Brunker (Dublin); Mr. T. Dobinson (Bishop Auckland); Mr. W. R. Dodd (Cheshunt); Mr. J. J. Evans (Liverpool); Mr. F. H. Lescher (London); Mr. W. Luman (Edinburgh); Captain W. V. Johnston (Dublin), died on active service; Mr. J. Kirkpatrick (London); Lieut. Colonel Clifford Probyn (London); Mr. W. E. Row (Sydney); and Mr. W. T. Upfill (Walworth).

Mr. H. WHIPPELL GADD proposed that the report be received and adopted. He said that members owed a deep debt of gratitude to the Executive for preserving the continuity of the Conference, for he conceived of nothing which was of more practical use or afforded more interest to its members in each instance for a very small expenditure of money than the Conference. The President had referred to the slightly different interests of the wholesale and retail pharmacist, and the Conference was the only place or occasion on which they could meet on equal terms and on a common platform. He felt sure it was the wish of all of them that they should co-operate more closely in the future than they had done in the past. The report was a brief but also a most remarkable one in some respects. It contained a sad note, deeper than usual, because it recorded the loss of so many personal friends and good workers, one of whom at least had died as a direct consequence of his service to his country. But it also contained references to matters on which members might congratulate themselves. The Research Sub-Committee had suspended its operations, but not before it had made a most remarkable discovery of a very substantial endowment. They were very much to be congratulated that for the first time there were now funds at the disposal of the Committee for the furtherance of pharmacy.

Mr. F. W. CROSSLEY HOLLAND seconded the resolution for the adoption of the report, which was agreed to.

THE TREASURER'S REPORT.

The statement of receipts and expenditure for the year ended December 31, 1917, showed a balance in hand of 44l. 0s. 3d., against 83l. 10s. 1d. at the corresponding period in 1916. The receipts are made up of subscriptions 316l. 1s. (309l. 18s. 3d. in 1916); sales of "Year-book," 32l. 15s. 5d. (10l. 16s. in 1916); advertisements, 74l. 12s. (73l. 4s. 2d. in 1916); bank interest, 8l. (4l. 12s. 9d. in 1916). The expenses on the "Year-book" were 269l. 11s. 9d. (252l. 7s. 11d. in 1916); editor's salary and honorarium, 100l.; other items of commission, postages, journals, etc., making up the balance. Particulars are also given of the Bell & Hills Fund and the Research Fund, the respective balances being 43l. 10s. 9d. and 18l. 12s.

The Hon. Treasurer (Mr. D. Lloyd Howard) submitted his report for the financial year. He stated that a gratifying feature in the accounts of 1917 was that the income had slightly increased on subscriptions, sale of "Year-books," and advertisements. This, he thought, was very satisfactory, showing that even under present circumstances interest in the Conference was well maintained. On the other hand, owing to the greater cost of everything in connection with the printing and publishing trade, the expenditure had again exceeded the income by nearly 40l. They still had a balance of 44l. 0s. 3d. The receipts to date were 250l. in subscriptions, as against 240l. at the same period last year. There had been no grant made from the Bell & Hills Fund in 1917. He regretted also to have to report that no application for grants from the Research Fund had been made during the year. The hint which he had given at last Conference that the annual subscription was not limited to 7s. 6d. had been acted upon, he was glad to say, by an increased number of members.

Mr. A. R. MELHUISE moved the adoption of the Hon. Treasurer's report. If at the end of the fourth year of the war there was more money in hand than formerly, the financial position of the Conference was very satisfactory. The Conference undoubtedly met a great need in pharmacy. He could only express the hope that in future years their Treasurer would have more money to spend, and that they would find men who were prepared to come forward not only with scientific but also with business papers. If they could combine these two features there would be a brighter future for pharmacy in all respects. (Applause.)

Mr. H. SKINNER seconded, and the report was unanimously agreed to.

ELECTION OF OFFICE-BEARERS.

Mr. W. A. H. NAYLOR proposed the election of the following office-bearers for the ensuing year: *President*, Mr. W. Kirkby; *Vice-Presidents*, Mr. W. L. Currie, Mr. W. P. Evans, Mr. J.

Mitchie, Mr. Edmund White, Mr. G. Whitfield, and Lieut. Colonel E. F. Harrison; *Treasurer*, Mr. D. Lloyd Howard; *Hon. General Secretaries*, Capt. H. Finnemore and Mr. R. R. Bennett; *Members of Executive*, Mr. F. W. Crossley Holland, Mr. A. Deane, Mr. F. W. Gamble, Mr. C. H. Hampshire, Mr. A. R. Melhuish, Mr. H. Skinner, Mr. T. Stephenson, Mr. H. Wyatt, and Professor H. L. Smith.

Hon. Auditors, Mr. W. F. Gulliver and Mr. W. L. Howie. Mr. Naylor pointed out that the changes proposed were very few in number.

This fact evidenced that the work of the Executive during the past year had been very faithfully performed. To the Hon. General Secretaries they owed an immeasurable debt of gratitude for their long-continued laborious and valuable services. (Applause.) The same remark applied to the Hon. Treasurer, Mr. Lloyd Howard. The name of the President of the Society appeared for the first time in the list of proposed officers, and members would extend to that gentleman their most cordial welcome. (Applause.) Mr. Currie was an astute business man, thoroughly alert and vigorous in the prosecution of all good work which he believed was in the interests of pharmacy. (Hear, hear.) He understood that the invitation to Liverpool was to be extended to them on this occasion, and the hope was entertained by all of them that next year the retiring President and all the members would be able to embrace the opportunity to visit Liverpool. Mr. William Kirkby, who was proposed as the new President, needed no words of commendation. The University of his own city of Manchester had shown its appreciation of his high worth by conferring upon him the degree of Master of Science. (Applause.)

Mr. H. HUMPHREYS JONES, in seconding the proposal, said there was no man in pharmacy for whom he had greater personal regard than for Mr. Kirkby, and in saying this he was voicing the opinion of all the pharmacists of the country. (Applause.) He then renewed the invitation that the Conference should come to Liverpool so soon as the opportunity occurred after the war.

Mr. W. H. SAUNDERS, as a member of the Conference for over thirty years, and as a member of the Liverpool Chemists' Association, very heartily supported the invitation extended by Mr. Humphreys Jones.

Mr. W. KIRKBY thanked members of the Conference for having invited him to become President during the coming year. He did not regard the honour as being entirely a personal one, but rather as one which was intended as a recognition of the City of Manchester, to which he belonged, and which for a great number of years had been intensely interested in the British Pharmaceutical Conference.

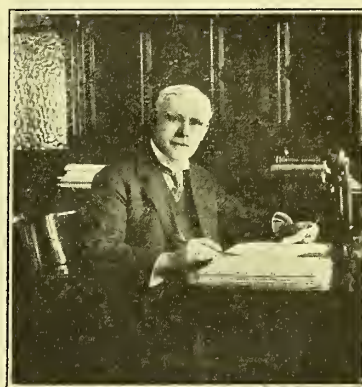
THANKS TO RETIRING PRESIDENT.

Mr. ROWSELL proposed that the thanks of the meeting be given to the retiring President, Mr. C. A. Hill, for his work during the past year.

This was seconded by Mr. JENKIN, and carried unanimously.

The PRESIDENT briefly thanked the members for the vote of thanks tendered to him. He mentioned that two scientific papers had been sent in, and these would be published in the "Year-book."

The proceedings then concluded. The members afterwards had lunch together in the Holborn Restaurant.



MR. WM. KIRKBY.

Mr. Kirkby is the son of a pharmacist and distinguished himself at the School of Pharmacy in 1882, in which year he became a pharmaceutical chemist. He was afterwards with Wright & Barnaby, Manchester, and in 1886 joined Jewsbury & Brown, Ardwick Green, with whom he occupies an important position. He is a M.Sc. of Manchester, and connected with many Pharmaceutical bodies. Mr. Kirkby is well known for his historical research, and he is commonly credited with the leadership of Lancashire opinion on pharmaceutical matters.

The Evaluation of Balsam of Tolu.

By T. Tusting Cocking and Jas. D. Kettle, B.Sc., F.I.C.

Abstract of a Paper Contributed to the British Pharmaceutical Conference.

THE unsatisfactory method of the British Pharmacopœia, 1914, for the estimation of the balsamic resins in balsam of tolu has been pointed out by several observers. The authors, who have previously published processes for the evaluation of benzoin, tolu balsam, and storax (*C. & D.*, lxxx., 413, 789; "Year-book," 1914, 355), have worked out the following method for tolu in which xylene is used for softening the resinous matter while the aromatic acids are boiled out with magnesium oxide and water. The mode of procedure is as follows:

(1) **FREE BALSAMIC ACIDS.**—Five grams of the balsam are dissolved in 25 c.c. of hot alcohol in a 250-c.c. CO₂ flask, 5 grams of light magnesium oxide and 20 c.c. of xylene are added, and the flask shaken round until the contents are well mixed. 100 c.c. of water are now added, the flask connected to a reflux condenser and boiled for one hour. After cooling, the whole is poured on a Buchner filter, and the aqueous portion of the filtrate separated from the xylene layer, which is returned to the flask together with the filter-paper and adhering magnesia-balsam magma. A second 100 c.c. of water is added, and the flask again boiled for an hour, when the aqueous portion is separated as before and the extraction carried out a third time. The bulked aqueous liquids are washed once with 20 c.c. of ether, then rendered acid with hydrochloric acid, and the precipitated acids extracted by shaking out with ether. The greater part of the ether is distilled off, and the residual aromatic acids dried *in vacuo* over sulphuric acid and weighed.

(2) **TOTAL BALSAMIC ACIDS.**—2.5 grams of the balsam are saponified by boiling with excess of alcoholic potash: most of the alcohol is then evaporated off, the residue dissolved in 100 c.c. of hot water, and sufficient hydrochloric acid added to render the whole slightly acid. Five grams of light magnesium oxide and 20 c.c. of xylene are next added, and the whole boiled up under a reflux condenser for one hour. The aqueous liquid is separated, the extraction twice repeated, and the bulked aqueous liquids treated as in the case of the free balsamic acids.

The determination of the acid-value of the balsam is best made as follows:

Dissolve 5 grams of the balsam in about 50 c.c. of boiling alcohol, add a large quantity of phenolphthalein solution—3 or 4 c.c.—titrate the hot solution with normal alcoholic potash until the colour becomes dark brown (but not red), then attach to a reflux condenser, boil up for a few minutes in order to break up the precipitate, and finish the titration.

The following table was given of analytical data regarding samples examined during the past few years:

No.	Acid Value	Ester Value	Saponification Value	Per cent. Free Benzoic Acid	Per cent. Free Cinnamic Acid	Per cent. Combined Benzoic Acid	Per cent. Combined Cinnamic Acid	Per cent. Total Balsamic Acids
1	111.8	71.2	183	8.55	11.99	6.19	5.93	32.66
2	112.3	79.0	191.3	9.12	11.53	7.87	6.53	35.08
3	98.1	79.1	177.2	8.48	11.86	8.35	8.68	37.37
4	100.6	72.2	172.8	7.8	10.69	7.45	8.92	34.86
5	118.2	60.8	179	9.1	13.7	5.94	8.97	37.71
6	92.2	62.6	154.8	6.63	12.4	6.17	8.67	33.87
7	101.3	65.9	157.2	8.29	15.71	5.37	10.13	37.5
8	102.5	59.3	165.3	8.34	15.54	5.22	9.08	36.18
9	96.6	59.0	161.6	7.83	13.12	6.43	9.95	37.36
10	132.4	66.2	198.6	7.42	15.9	11.1	5.2	39.86
11	140.1	39.4	179.5	—	—	—	—	24.74
12	124.3	58.3	182.6	—	—	—	—	24.4
13	117.8	90.9	208.7	—	—	—	—	47.66
14	108.9	85.3	194.2	—	—	—	—	45.12

The experimental work has been carried out in the laboratories of The British Drug Houses, Ltd., under the direction of Mr. C. A. Hill, to whom the authors acknowledge their indebtedness for permission to publish the results.

Trade Notes.

PRICE REDUCTION.—The British Cyanides Co., Ltd., Oldbury, announce in their advertisement in this issue a reduction in the price of yellow and red prussiates of potash.

GLASS TUBES.—John Tye & Son, 457 Caledonian Road, London, N. 7, manufacturers of flat-bottom glass tubes, can now accept orders for limited supplies about ½ in. in diameter.

TOILET SPECIALITIES.—Thos. Christy & Co., Old Swan Lane, London, E.C. 4, give in this issue particulars regarding Quin-Quenna hair preparation and Phoenix brillantine. Special offers are made to chemists in connection with these specialities, the particulars of which are given in the firm's advertisements.

THE ANCHOR BRAND is a new trade-mark appended to the series of labels with which Ayrton, Saunders & Co., Ltd., Liverpool, distinguish articles of their manufacture. The star and mortar labels are already well known. An illustration of the new mark is given in the company's advertisement in this issue.

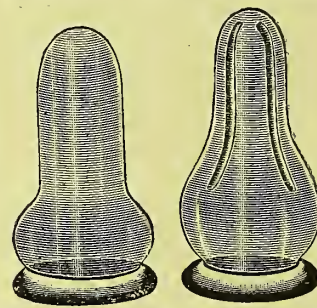
AMERICAN LINIMENT.—The British Drug Houses, Ltd., Graham Street, City Road, London, N. 1, have introduced a household liniment of the non-greasy type, which originated in America and enjoys considerable popularity in this country. An illustration with prices appears in the company's advertisement in this issue.

DR. CASSELL'S TABLETS.—The Veno Drug Co., Ltd., Veno Buildings, Manchester, announce that supplies of Dr. Cassell's tablets are now more plentiful, and in the course of two weeks there will be no shortage. In the meantime chemists are advised to order from the wholesale houses, and those who have ordered direct should note the paragraphs referring to direct orders.

FLY-QUIT.—Lawson & Co. (Bristol), Ltd., St. Philip's, Bristol, made a special offer in regard to Fly-Quit in an advertisement in the *C. & D.* last week. A Lawson spray, for demonstration purposes, will be sent with orders for a certain quantity of Fly-Quit, together with a supply of literature and display matter. In view of the hot weather, the offer should receive careful attention.

QUININE AND CINNAMON.—Oppenheimer, Son & Co., Ltd., 179 Queen Victoria Street, London, E.C., send us specimens of quinine-and-cinnamon pulverettes, which are selling rapidly at the present time as a preventive and cure for Spanish influenza. The pulverettes, which are coloured red, cost 16s. per thousand, and are also sold in bottles of twenty-five, this size being convenient for retailing.

OYLERS' TEATS.—We referred recently to the new factory opened by Oylers', Ltd., 35 New Cavendish Street, London, W. 1, for the manufacture of seamless rubber goods for medical and scientific purposes, including teats and rubber gloves. By improved manufacturing processes the teats are produced of an unusual transparency and are also flexible and durable; they stand boiling and are an excellent line for export trade because of the way in which they resist extreme temperatures. Two patterns of the teats are shown in the illustration. The range also includes teats for the bottle-feeding of lambs and calves. A price-list of the various kinds of teats will be sent on application.



Information Department.

INFORMATION WANTED.

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated.

123/33. Alicante unflavoured wine	122/37. "Set Snug" sanitary belts
123/25. "Lister" purifying water bag	118/3. "Cressyl" for gnat bites
122/50. Ol. ruba Alcona	122/11. Gold pencil for gilding teeth, made by "Harding, London"
124/41. Dr. Pierrec's nasal douche	
118/3. Iodocaine	

INFORMATION SUPPLIED.

Inquiries regarding the following articles have been answered. The information as to supply will be given to others who send a stamped, addressed envelope to the Information Department, THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C. 4:

"Conspy," 90/5 and 47/3	Stevens' "Silicob" jewellery
Coty's face-powder, 89/54	reviver, 94/28
"Crembas," 29/21, 71/2, and 85/53	Stillman's freckle cream, 31/70
Lynch's mange cure for dogs, 94/34	"Subitol," 80/59
McDougall's sheep dip, 81/57	Summers' castor oil pills, 210/21
"Marie Antoinette" shampoo-powders, 81/38	Warner's Safe Cure, 1/42
Pill-making machinery, 97/44	Watson's castor-oil pills, 72/50
Pituitrin, 85/34	Weeks' "Break-up-a-Cold Tablets," 258/27
Pollantin substitute, 78/8	Xylonite, 66/49
Poro-plastic felt, 113/2	"Yanatas," 46/72
Poudre Nilde, 27/44	Zymole trokeys, 66/47

Observations and Reflections

By Xrayser II.

Publicity

is an essential feature of democratic government, and we are assured that the government of our Society is democratic. Yet when a decision so momentous, and that has been so fiercely debated, as the appointment of a new Secretary has to be made, the Council goes into Committee and contradicts its own professed character by discussing and virtually deciding the matter in secret. In the face of such a proceeding criticism of the appointment is futile. We do not know the grounds on which it was made, the influences which determined it, or the objections (if any) made against it. We do not know who supported or who opposed it; we know in part only the conditions upon which it is held. We do know, however, or at least we are left to infer, that a principle that has been insisted on almost without a dissentient has been violated by the appointment made. This is democratic government with a vengeance! True, the case might not have been materially different if the decision had been made in open Council, for we know no more of its proceedings than it chooses to tell us, but it is significant that it was thought necessary to double-lock the door against us just now. I said the other day that Mr. Currie's occupancy of the chair did not augur well for progress in pharmaceutical government; a remark which his casting vote on this question of publicity fully justifies. Why was his casting vote necessary? Who were the abstainers when the vote was taken? Will Mr. Wolff enlighten us, or will he feel himself in honour bound by the decision that secrecy is the order of the day, having been outvoted with regard to it? It is a nice point. I hope he will at least tell us whether any heads were broken in Committee.

Mr. Ridyard Complains

that I do not credit him with ability to distinguish between strategy and tactics. When I wrote I had before me the letter in which, after saying that strategy "deals with plans and schemes rather than with individuals," he goes on to speak of those "smaller plans" which may be means of decentralisation be "turned over" to men responsible for them and which, "taken together, constitute the whole." These smaller plans I class as tactics: if, taken together, they are the whole of strategy, what necessity is there for that "central thought and imagination" which, whether it is strategy or policy, or both, deals with the larger schemes, and the lack of which Mr. Ridyard himself deploras? We seem to differ mainly in our terminology, which is not of much importance, for Mr. Ridyard in his second letter admits that weakness (he calls it bad strategy) has resulted from leaving to local bodies affairs that ought to have been controlled from the centre.

London and Middlesex Insurance Statistics

for 1917 both show a loss of profit, in the one case of 11.9 per cent. and in the other of 12.6 per cent. from the adoption of the new Tariff. Seeing that the average cost of prescriptions in London was but 5.74d., and in Middlesex but 5.98d., it is not likely that there would have been any discounting in either area under the Tariff of 1915. The loss we have sustained is not chargeable to the principle of the new Tariff, but to the inadequacy of the fees, the raising of which to such a figure as will meet not only our nominal loss but the increased expense of the service as well must be insisted upon when we make our agreements for a further term of service.

The Life of Sir William Ramsay,

as told by Sir William Tilden in the volume just published by Macmillan & Co. (10s.), is full of interest from other points of view than the chemist's, but it is to this that I must confine myself here. Ramsay had an hereditary bias towards chemistry from both sides of his ancestry, and began his experiments in the science as a boy, long before he studied

it systematically, which was not till 1869, when he was in his eighteenth year and a student in the University of Glasgow. He worked in the laboratory of Mr. Tatlock in that city in addition to his college classes, and soon became marked as a student of great promise. A year or so in Germany—for a time under Bunsen at Heidelberg, for a longer period with Fittig at Tübingen—followed, and on his return to Glasgow in 1872 he obtained the post of assistant to the Young Professor of Technical Chemistry in Anderson's College. He had taken the degree of Ph.D. at Tübingen with a dissertation on toluic and nitro-toluic acids, and for a while his work at Glasgow was chiefly in organic chemistry, but in 1879 he turned to the physical branch, in which he was to make such notable discoveries. In that year, too, he was appointed, largely owing to the advocacy of Jowett of Balliol, to the Professorship of Chemistry in the new University College at Bristol, where he remained till his appointment as Professor at University College, London, in 1887. At Bristol he had little time for research, which was in those days rather discouraged in professors, whose proper business was considered to be teaching.

The Story of his Work in London

is admirably told in Chapters IV. and V. The first of his great discoveries, that of the new element argon, was made in collaboration with Lord Rayleigh. It had long been known that atmospheric nitrogen is considerably heavier than nitrogen obtained from chemical sources, and Ramsay suspected the presence in this gas of an inert gas heavier than nitrogen that had escaped notice. After many experiments argon was obtained and soon afterwards, in seeking a clue to its compounds, Ramsay discovered the equally important but hitherto hypothetical element helium. It is noteworthy that his first public hint of these expected discoveries was given to the Pharmaceutical Society. The discovery of other elements of the argon group was almost a matter of course, but in his study of radium and its emanation (to which he gave the name of niton) Ramsay surpassed his former achievements. He regarded niton as "one of the most potent if not the most potent chemical agent in nature"; it suggested to him startling views of the utilisation of radio-active change to effect chemical decomposition and even the "transmutation" of elements. He elaborated and defended this idea before the Chemical Society in 1910.

The Story of Ramsay's Later Years

is occupied mainly by essays and addresses to various learned Societies, and an account of the honours and emoluments (including the Nobel Prize) which fell so thick and fast upon him. There is no need to enumerate these, but a word may be said of his views concerning education. These, we are told, were derived from his experience of the Scottish school system and what he had learned from the Universities of Glasgow and Tübingen. He held the opinion that free primary education without some return in the form of national service was a huge mistake, and for "payment by results" as embodied in the first Education Act he had a great contempt. Of examinations generally he had a poor opinion; he insisted on instruction for its own sake. He always recommended his pupils to make their own apparatus so far as possible; and though he thought highly of the value of analysis, both qualitative and quantitative, as a method of training, he insisted on experiment as of the first importance to the student, and on research at every stage, if real progress is to be made in chemical knowledge. He was of a genial, cheerful, humorous temper, always popular with his classes, and in all the relations of life full of kindness and consideration for others. The extracts given from his letters are as full of charm as of interest.

SCIENTIFIC RESEARCH IN JAPAN.—The Japanese Government has granted the sum of 2,000,000 yen for the establishment of an Institute for Scientific Research, and this has been supplemented by contributions from the Emperor and from wealthy Japanese. The new Institute is intended to furnish opportunities which it is hoped will directly benefit technical and industrial undertakings.



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Editorial Articles.

Drug-supply in War-time.

THE main purpose of the proceedings on Wednesday of the British Pharmaceutical Conference was to secure continuity in the existence of the body which aims at advancing pharmacy on the scientific side. There will in the future be more need than ever of a development of this branch of pharmacy, but the suspension of scientific activities has been an inevitable result of the war and the absorption of pharmaceutical workers in the work of crushing Prussian militarism. The President, Mr. Charles Alexander Hill, chose for his address a topic which is not only of particular interest at the present time, but will place on record the state of affairs in the drug-trade after four years of the most disastrous war the world has ever known. Mr. Hill gives particulars regarding the supplies of twenty-eight crude drugs, and the thing that strikes one first is the fact that the supply has been so well maintained. Very few of the drugs are unobtainable, and it can hardly be said that any of those in this category are essential. The dependence upon Germany for synthetic chemicals was a much more serious matter, and it is a subject of congratulation to British chemists that despite the disadvantage under which the manufacturers labour, all essential synthetic chemicals have been forthcoming. This independence of Germany must be maintained at all costs and there is no doubt that the Government having been seized with the fact that the chemical supply of the country is a key industry will not allow the business to relapse to the old condition after the war. Mr. Hill deals with Government control of raw materials, and insists that the Government, having taken this line of action, must see that supplies are allotted to the industries depending upon the controlled materials. Freight difficulties have caused much of the present scarcity, but the Government through the Shipping Controller can arrange for the conveyance to this country of supplies of drugs which are urgently needed. The President's review of the drug-supply reveals to some extent a lack of co-ordination in the allocation of shipping space, and there is also the difficulty which importers experience in obtaining permits to import certain essential drugs. As regards asafetida, to which Mr. Hill refers, it is a curious fact that at the end of May the United States was able to import 60,000 lb. from the Persian Gulf direct, and as part has been rejected by the New York Customs examiners it has been re-shipped to London! The scarcity of calumba is also alluded to, and it is likely to continue, as permission to import has been refused although there is

not a bag to be had on the open market. As regards cannabis indica, mention should be made of the American product in view of the scarcity of Bombay tops, and if only the price (18s. to 20s. per lb.) could be made more attractive, there would be more inducement to the manufacturers of pharmaceutical preparations to give it a trial. Cascara sagrada is likely to remain very dear for some considerable time owing partly to the very heavy cost of freight. As regards Persian galls, they are not likely to be obtainable while the Turks hold Mosul, one of the chief centres. To Mr. Hill's statement on Sicilian liquorice-root may be added the fact that considerable parcels have been offered to London houses from Sicily, but lack of freight is the chief difficulty. Mention might also be made of the Indian liquorice-root, of which very fair quantities of good quality have been available. In regard to honey, the fruit and sugar shortage as well as the freight question has helped to push up prices, but London has in consequence attracted imports from all the world's honey centres, and never have the shipments been larger. Hamburg was formerly the headquarters for Cuban honey, but since the war began London has taken considerable quantities. Sarsaparilla has at times been scarce, but wonder is expressed by the trade at the large consignments of native Jamaica which occasionally come forward. The fact that one of the large steamship owners is also interested as an actual importer of the drug may have an influence here. In spite of its doubtful physiological position, sarsaparilla has lost none of its popularity during the war, and the fact that wholesalers paid 5s. 6d. per lb. for grey Jamaica description last week looks as if price is of little consideration. Senna has been plentiful throughout the war, but although there is a stock of over 8,000 bales in London export permits are refused. Mr. Hill's list of synthetic chemicals made here since the outbreak of war can be extended considerably, and should include acetanilide, paraldehyde, benzoic acid and sodium benzoate, salol, thymol, terpin hydrate, benzaldehyde, and terpineol. We are glad to see a protest from Mr. Hill regarding the slowness of those who have undertaken to publish standard formulæ for lard-free ointment-bases. The President of the Pharmaceutical Society assured the Council last March that the formulæ were ready and could be published straight away, but judging by remarks made at last week's Council-meeting—four months after—it is still uncertain when the formulæ will appear. The General Medical Council, which receives large profits from the British Pharmacopœia, has shifted its duty in this matter, and we think steps should have been taken to compel that body to carry out its statutory duties. An Act of Parliament appointing pharmacists to carry out the work would have provided an irrefutable argument for the participation of chemists in the production and profits of the British Pharmacopœia in the future. Mr. Hill's address finished with an appeal for the constitution of a body which could represent all branches of the drug-trade in its dealings with Government Departments, Parliament, and the public. The same appeal was made last year, but fell on deaf ears so far as the Pharmaceutical Society was concerned. Perhaps with a change in the President and chief executive officer of the Society the appeal may obtain a more sympathetic reception. Since we wrote the note on the Conference which was published last week we have received copies of the two papers which were presented on Wednesday and taken as read. An abstract of one of these is printed in this issue.

Enemy Patents and Trade-marks.

SIR EDWARD CARSON is evincing a useful interest in the many applications for patents in this country which have been made by enemy aliens since the outbreak of war. He does not understand how it is that patent-agents here should be allowed to correspond freely with Germans. The argument is put forward that the advantage in the present arrangement is reciprocal from the fact that although patents are not granted to enemies, disclosures of inventions are made which may be used under licence by British manufacturers. We have heard also the suggestion that some patent-agents in this country carried on

such a large proportion of their businesses with Germans that it was feared that the war would seriously affect them. A scheme was therefore devised and placed before the Board of Trade by which the fees from enemy inventions were still paid in this country through patent-agents. In the early stages of the war the British people had not realised fully the treacherous character of the German nation, but we think that it is now high time that the scheme devised by interested patent-agents should be cancelled. The United States is not going to allow Germans any patent privileges during the continuance of the war, and this country may well fall into line with a nation which contains a larger proportion of inventors than any other people. We wonder, too, whether the British Government could see its way to make representations to the Argentine Government regarding the activity of the Germans in registering as trade-marks in that country the names of drugs which are, and have been for years, public property in the United Kingdom? A glaring example is the word "antipyrin," which we see by the "Boletín Oficial" of Buenos Aires was registered last September by the Farbwerke vormals Meister, Lucius & Brünig. The point to bear in mind is that the overseas trade of British manufacturers is being constricted by this action of Germans, and our Government should, we think, take steps to counter this new Hun trade trick. United action by the Allies should result in a definite policy by which German trade may receive severe economic injury and the nation be so crippled financially that she will not be able to indulge in her diabolic plans for another world-war.

Emulsions.

MR. SPENCER U. PICKERING, F.R.S., who twenty years ago was one of the leading authorities in this country on the subject of solution, has communicated to the Chemical Society an article on "The Detergent Action of Soap," which deserves the attention of students of emulsification because it really deals with that subject; in fact, Mr. Pickering says:

"The possibilities of incorporating water with fats or melted waxes was first recognised by Galen, since which time products thus obtained have been in use as cosmetics, cold-cream being one familiar instance. They exhibit some of the properties of emulsions, due to the enclosed globules being comparable in size with those in emulsions, but, as the globules are not encased in a pellicle, their permanence depends on the semi-solid condition of the menstruum. Mercurial ointment is another instance. Air may similarly be enclosed in soft caramel, as is done in the manufacture of sweetmeats exhibiting a silky texture."

The communication is a record of experiments with potassium stearate, potassium palmitate, potassium oleate, soft potash soap, and soft soda soap in combination with A, B, and C paraffin oils, Pratt's motor-spirit, "Royal Daylight" lighting-oil, Carless's solar distillate, and pure benzene. Mr. Pickering describes the emulsification of these oils with the soaps, also the methods of analysis and composition of the products, thermal changes, and the effect of naphthalene on soap. The principal conclusions are:

"The detergent action of soap is due in part to its power of emulsifying oil, the oil-globules of which become enclosed in a pellicle, which prevents them rendering contiguous substances oily; in part to the lowness of surface tension between oil and soap solution; and perhaps in part to the union of dirt with the acid soap produced by hydrolysis. A more important factor is that oils, even paraffin oils, dissolve in soap to form soluble compounds, which contain in some cases nearly equal weights of oil and soap. Except when the oil added is small in amount a certain proportion of it becomes emulsified, and incapable of combining with the soap, owing to the protecting pellicle, hence considerable excess of oil must be taken for the soap to combine with the maximum amount of oil possible. The compound formed is not decomposed by excess of water, but dilution of the soap previous to its treatment with oil results in much less oil combining with it, because a larger proportion of the latter becomes emulsified."

Mr. Pickering also considers that the proportions of oil and soap which will unite with each other depend on the chemical and not merely physical nature of the reagents,

also that the presence of naphthaline decreases the amount of paraffin dissolved by soap. His observations have special reference to horticultural preparations, he being the leading authority at the fruit-farm at Woburn.

Personalities.

SIR EDWIN CORNWALL, Bart., Chairman of the National Health Insurance Committee, is ill and unable to attend to his Ministerial and Parliamentary duties.

WOR. BRO. LIBBIS N. BURCH, The Pharmacy, Chard, was installed as Worshipful Master of the Lodge "Prudence and Industry" No. 1953 for the ensuing year on July 30.

AMONG those present at the dinner of the American Society in London on July 4 (Independence Day) were Mr. Sigismund Kutnow and Mr. Frederick C. van Duzer.

MR. C. TRIM JOHNSON, manager and Secretary of the George Town Dispensary, Ltd., Penang, is in England for a short time, and may be addressed at Southborne, Emsworth, Hants.

MR. NORMAN EDWARDS, younger son of Mr. R. G. Edwards, Ph.C., Fallowfield, Manchester, was awarded the Dauntsey Scholarship at a recent examination in medicine at Manchester University.

MR. A. JERROLD-NATHAN, C.C., chairman of Barclay & Sons, Ltd., took the chair during Baby Week at the Caxton Hall for the National Council for the Protection of the Unmarried Mother and her Child.

MISS PHYLIS FAIRWEATHER, daughter of Mr. J. Y. Fairweather, chemist and druggist, Sydenham Road, London, S.E., was awarded the "Tester Jones" Scholarship in singing at the Blackheath Conservatoire of Music on June 23.

MR. GERALD RICHARD BAXTER, second son of the late Mr. W. S. Baxter, chemist and druggist, Bramley, Leeds, has obtained the degree of M.B., Ch.B., Leeds, with honours. Two years ago Mr. Baxter received the dental degree of Leeds University.

MR. PARKIN S. BOOTH, accountant to the Association of Manufacturing Chemists, Ltd., participated in the final for the War Challenge Cup at the West Cheshire Golf Club, but was beaten. He was, however, the recipient of a silver cigarette-box as memento.

WOR. BRO. DOUGLAS W. BULL (druggists' sundriesman, Homerton, E.), Prov. Senior Grand Deacon of Essex, Secretary of the Antioch Lodge, etc., was presented to H.R.H. the Duke of Connaught on a recent occasion as an officer of the Jubilee Masters' Lodge.

Military Tribunals' Decisions.

SINCE OUR LAST REPORT the following decisions have been notified:

BATH.—Mr. F. E. Cooper, chemist and druggist (Tylee & Cooper), appealed against the recent decision to call him up on August 6 (*C. & D.*, June 22, p. 54), contending that as a qualified pharmacist in Grade 2 he was still certified. The National Service Representative, asked about Grade 1 men not being called up, replied that he had no information on the point. After Mr. Cooper had explained that seven or eight other men had been marked down by the Advisory Committee as dispensable, and that he was only asking for fairness, the case was adjourned for a fortnight so that the local Tribunal might present a statement as to the position.

BYFLEET.—Mr. P. F. Johnson, assistant with Mr. S. B. Moss, chemist and druggist, was granted a month's final exemption.

ONE-MAN BUSINESSES.—The Hon. Secretary of the London and District One-man Business Association informs us that the address of this Association is Anderson's Hotel, Fleet Street, London, E.C. 4, where particulars may be obtained on application by those interested.

THE HERTFORDSHIRE INSURANCE COMMITTEE, with the assent of the National Service Representative, decided on July 1 to release the following chemists and druggists for military service: Messrs. W. Clark, Stevenage; J. H. Cooke, Watford; T. H. Fisher, St. Albans; G. G. Jeffrey, Tring; F. H. Keats, Bishop's Stortford; H. D. Roffey, Barnet; G. Swinnerton, Hitchin. The following were retained: Mr. H. E. Wood, Ph.C., Watford; and Messrs. F. Postlethwaite, Hoddesdon; E. E. Russell, Letchworth; H. F. Saunders, Barnet; P. H. Symms, Barnet; P. H. Warren, St. Albans; J. T. Webb, Royston, chemists and druggists.

Births.

ELLIS.—At 62, Ecclesall Hall Road, Sheffield, on July 3, the wife of Bernard Ellis, chemist and druggist, barrister-at-law, of a son.

FAIRWEATHER.—At 313 Sydenham Road, London, S.E., on July 2, the wife of J. Y. Fairweather, chemist and druggist, of a son.

GREAVES.—At Chellow Dene, Shortbutts Lane, Lichfield, on July 4, the wife (*née* Glynna Lloyd-Williams) of William Lancaster Greaves, chemist and druggist, of a daughter.

HOLMES.—At 17 Sunnyside Lane, Darwen, on July 4, the wife of N. W. Holmes, chemist and druggist, of a son.

Marriages.

GREEVES-ROLLETT.—At St. Nicholas Church, Wrentham, on July 4, by the Rev. E. R. Yerburgh, assisted by the Rev. H. M. Viret, William Francis Greeves, Ph.C., County Laboratory, Norwich, younger son of Mr. W. E. Greeves, Wrentham, to Elsie Eveline, only daughter of Mr. H. Rollett, chemist and druggist, The Pharmacy, Wrentham, Suffolk.

HUNT-WELLAND.—At Rathmines Parish Church, Dublin, on June 29, by the Rev. Lewis H. Crosby, B.D., Rector, Henry Hunt, M.P.S.I., L.R.C.P. & S.I., Eglinton, Rathgar, formerly manager of Dr. Barnes' Medical Hall, Dublin, to Maye, widow of William Welland, Brookdale, Midleton, co. Cork.

STENHOUSE-BURRELL.—At Edinburgh, on June 25, by the Rev. P. Beith, Corstorphine, assisted by the Rev. J. F. Leishman, Kelso, Alexander Lees Stenhouse, chemist and druggist, Linton Down, Kelso, to Annie Smith Burrell, chemist and druggist, younger daughter of Mr. Thomas Burrell, Ph.C. (late of Montrose), "Woodlea," Corstorphine.

THOMAS-BROWN.—At Kingston Vale Church, on July 6, by the Rev. A. G. Meugens, Lieutenant Edward L. B. Thomas, chemist and druggist, to Florence, only daughter of Mr. H. A. Brown, The Croft, Kingston Hill, Surrey.

Silver Wedding.

DOUGLAS-BANTICK.—At St. Mark's Church, Kennington, London, S.E., on July 12, 1893, by the Rev. A. E. Shaw, J. Wellesley Douglas, chemist and druggist, Lambeth, to Carrie J. Bantick, Clapham. Present address: 19 Kennington Terrace, Kennington Park, S.E.

Deaths.

FROST.—At "Caversham," St. Matthew's Road, Worthing, on July 3, Mr. William Frost, chemist and druggist. Mr. Frost, who was in business before August 1, 1868, had a pharmacy at Railway Approach, Worthing, for many years. He was at one time a member of the Worthing Town Council, and during his term of office took an active part in the establishment of a free library in the borough. He was also associated with the local Baptist Church, and was a past-President of the sectional Free Church Council. For some years past he had been in failing health. He leaves a son, who is a Town Councillor, and a daughter, the Librarian and Curator of the Public Library. The funeral took place at Broadwater on July 6.

STEPHENS.—At his Wiltshire residence, Cholderton, on July 3, Mr. Henry Charles Stephens, of Avenue House, Finchley, aged seventy-seven. The late Mr. Stephens was the founder of the business of Henry C. Stephens, manufacturing chemist and inventor of Stephens' ink. He was a life member of the Chemical Society and a member of the Society of Chemical Industry.

WEBB.—At 24 Elgin Road, Alexandra Park, London, N., on July 3, Mr. George Webb, late representative of Smith & Co., 132 High Street, Borough, S.E., aged fifty-one. Mr. Webb had represented Smith & Co. for over twenty years. By his invariable courtesy and high principle he had made a large circle of friends, by whom the news of his death will be received with deep regret.

Died on Service.

RILEY.—Private Oliver Riley, Loyal North Lancashire Regiment, is officially reported killed in action, aged thirty-four. Private Riley, who was the son of the late Mr. J. E. Riley, J.P. (J. Riley & Sons, Hapton Chemical Works), joined the Army eighteen months ago. He leaves a widow and two children.

Association Affairs.

Association of Women Pharmacists.—The annual business meeting was held on July 4 at Gordon Hall, Gordon Square, London, W.C., Miss Buchanan in the chair. There was no contested election for the Committee, Mrs. Irving and Miss Fordyce being elected in place of Miss Heywood and Miss Hughes, the retiring members.

Cambridge.—The Cambridge and District Pharmaceutical Association met on July 5 at Mr. Church's, St. Andrew Street, when the arrangements for the meeting of the Federation to be held in Cambridge on August 15 were considered. The agenda was discussed, and Messrs. Barker, Church, and Flanders were appointed as Hospitality Committee. The local military position was also dealt with. The President (Mr. A. S. Campkin, J.P.) referred to his re-election to the Pharmaceutical Council, and took the opportunity of thanking the members of the Election Sub-Committee for their efforts on his behalf. He also gave a very interesting report of the Committee work in which he had been engaged at Bloomsbury Square since they had last met. The statement that he had been appointed Chairman of the "Journal" Committee, and that the report of the Committee on Organisation was to be forwarded to the local Associations for comment, was received with the warmest approval.

Midland Pharmaceutical Committees.—Mr. Young (Leicester) presided at a meeting of Secretaries of Pharmaceutical Committees, which was held on July 5 at the Midland Hotel, Derby, from the districts of Burton-on-Trent, Derby, Derbyshire, Leicester, Leicestershire, Nottingham, Nottinghamshire, Sheffield, Staffordshire, and Stoke-on-Trent. A member of the Central Pharmaceutical Advisory Committee and the L.A.E. attended. Resolutions were forwarded to the Committee in London suggesting several alterations in the mode of recruiting with a view to arriving at some uniformity in the several areas. The meeting was convened by Mr. C. W. Ridyard.

Insurance Act Dispensing.

A Record of matters concerning Chemists' interests in the National Health Insurance Acts.

Reports from Local Centres.

ENGLAND.

Blackburn.—In view of a communication from the Commissioners relative to dispensing chemists and the present military needs, the Insurance Committee has authorised a general review of all exemptions held by local chemists in the light of the recommendations made by the Commissioners. The prescriptions dispensed by Blackburn chemists for April numbered 11,954, against 12,148 for March, and the Committee has advanced 224*l.* 1*s.* 11*d.*, or 75 per cent., of the estimated cost.

Croydon.—The Insurance Committee met on July 2, when the only matter discussed was a recommendation by the Medical Benefit Sub-Committee that a panel practitioner be surcharged 10*l.* for excessive prescribing. The Panel Committee had investigated the matter and found that the allegations were correct; but, after an exciting debate, the Insurance Committee refused to adopt the recommendation, which was referred back to the Sub-Committee.

Manchester.—A meeting of panel chemists was held at 65 Market Street on July 3. The President (Mr. J. H. Nidd), in his opening remarks, explained that as this was his first appearance as their President he wished to thank them for the honour they had done him in electing him. He would endeavour to carry out to the best of his ability the duties appertaining to the office. Mr. A. Hershberg, Secretary of the Pharmaceutical Committee, then read the annual report of the Committee's work. On the motion of Mr. C. Griffiths it was adopted and carried unanimously. The Treasurer (Mr. J. Bell) explained how the levy had been made, and which had come to less than 1 per cent. for the year 1917. The report is to be sent to every chemist on the panel. Mr. Griffiths said that it was essential that the hour of closing (8 P.M.) should, if possible, be made the final hour for the dispensing of Insurance prescriptions, but on Mr. F. W. Bates, Chairman of the Pharmaceutical Committee, explaining the present position and the steps that had been taken in this matter, the motion which he (Mr. Griffiths) intended to put was withdrawn. The Secretary (Mr. Hershberg) then gave a *résumé* of the policy adopted by the Committee regarding the military service question,

and explained the measures taken to retain so far as possible an adequate pharmaceutical service for the carrying out of the Insurance dispensing work. A resolution expressing the thanks of the panel chemists to the officials and members of the Pharmaceutical Committee for the work was carried unanimously.

Sheffield.—The Insurance Committee met on July 3, when Mr. J. T. Appleton was appointed to the Sub-Committee dealing with the further calling-up of medical men for Army service. Payment of chemists' accounts amounting to 948*l.* 11*s.* 8*d.* was ordered, and the expenditure of 477*l.* 10*s.* 5*d.* for new prescription-books was also authorised.

Southport.—The monthly meeting of the Insurance Committee was held on June 25, and was attended by Messrs. J. Righton and F. Battersby (chemists' representatives). The Finance Committee recommended payment of 127*l.* 2*s.* 4*d.* to sundry chemists for March and April payments, the account to be debited to the Drug Fund. This was approved.

SCOTLAND.

June Drug-prices.

The June Appendix to the Scottish Drug Tariff contains a large number of which the cost has increased. Prices for the month are as follows:

Name	s.	d.	s.	d.	Name	oz.	s.	d.	dr.	
Name	oz.	dr.				s.	d.	s.	d.	
Acetanilid. ...	1	1	0	2	Oxymel scil ^l	0	3½	0	0½	
Acid. acet. glac. ...	0	7	0	1	Paraff. dur. ...	0	2	0	0½	
Acid. tannic. ...	1	10	0	3½	Paraff. liq. ...	0	3	0	0½	
Acid. tartaric. ...	0	5	0	1	Paraff. moll. ...	0	2	0	0½	
Aloin. ...	1	1	0	2	Paraff. moll. alb. ...	0	3	0	0½	
Ammon. brom. ...	1	5	0	2½	Paraldehyde ...	1	10½	0	3½	
Aq. anethi, anisi,					Phenacetin. ...	4	0	0	7	
camph., carui,					Phenazon. ...	7	4½	1	1	
chlorof., cinnam.,					Pheno lph'halein. ...	7	4½	1	1	
feniculi, menth.,					Pot. brom. ...	1	4	0	2½	
pip., menth. vir.,					Pot. permang. ...	2	3	0	4	
pimento, sambuci,					Pulv. ipecac. co. ...	1	8½	1	3	
all at monthly					„ jalap. co. ...	0	8	0	1½	
flat rate of 3 oz.					Sacch. lact. ...	0	9	0	1	
or part ...	0	1			Sinapis ...	0	2½	0	0½	
Aq. rosæ, 1 oz. or					Sod. benz. ...	3	2	0	5½	
part ...	0	1			Sod. brom. ...	0	8	0	1½	
Caffeina ...	6	8	0	11½	Sp. rect. ...	0	9½	0	1½	
Calcil lact. ...	1	9	0	3	Sulphonah. ...	11	2½	1	7½	
Camphor ...	0	7	0	1	Syr. chloral. ...	0	8	0	1½	
Cap. creosoti, m. 2	4½	d.	pcr doz.		„ ferri iod. ...	0	4	0	1	
Chloral hydras ...	2	5½	0	4½	„ glyceroph. ...	0	5	0	1	
Cocain. hydrochlor.	—	14	8		„ limonis ...	0	2½	0	0½	
Conf. guaiac. ...	0	4½	0	1	Tab. phenacet. ...	6½	d.	doz.		
„ piper. ...	0	5½	0	1	„ „ co. ...	—	7d.	doz.		
„ sennæ ...	0	3	0	0½	Tinct. aurant. ...	0	9½	0	1½	
„ sulph. ...	0	3½	0	0½	„ iodi fort. ...	0	8½	0	1½	
Cresosotum ...	3	2	0	5½	„ rhei co. ...	0	4	0	1½	
Dec. sars. co. ...	0	1½	0	0½	„ zingib. ...	0	7	0	1	
„ „ couc. ...	0	8	0	1½	Ung. ac. boric. ...	0	2½	0	0½	
Ergotin. ...	4	8	0	8	„ „ carbol. ...	0	3	0	1	
Ext. aloes ...	0	7	0	1	„ „ salicyl. ...	0	3½	0	0½	
„ ergot. ...	—	—	—	7	„ chrysarob. ...	0	4½	0	1	
„ ergot. liq. ...	0	8½	0	1½	„ glyc. plumb. ...	0	4	0	1	
„ malt. c. ol. ...					sub. ...	0	4	0	1	
„ morrh. ...	1 <i>s.</i>	8 <i>d.</i>	1 <i>b.</i>		„ Hyd. nit. dil. ...	0	3	0	0½	
„ nac. vom. sic. ...	1	10½	0	3½	„ „ ox. flav. ...	0	2½	0	0½	
Glyc. acid. tan. ...	0	11	0	2	„ „ rub. ...	0	4	0	1	
„ boracis ...	0	8½	0	1½	„ paraffin. ...	0	2	0	0½	
Hexamina ...	1	6½	0	3	„ „ alb. ...	—	0	3	0	0½
Lin. meth. sal. co. ...	1	7	0	3	„ picis liq. ...	0	3	0	0½	
Liq. arsen. et hydr.					Zinc. sulphocarb. ...	0	6½	0	1	
iod. ...	0	2	0	0½						
„ formaldehyd. ...	0	5	0	1						
„ bamaelid. ...	0	3½	0	0½						
Lith. carb. ...	1	5	0	2½						
Lith. cit. ...	1	5	0	2½						
Lith. cit. eff. ...	0	4½	0	1						
Meth. boracis ...	0	4½	0	1						
Methylsulphonah. ...	11	2½	1	7½						
Mist. ammon. ...	0	1½	0	0½						
Ol. cajuput. ...	1	1	0	2						
„ caryoph. ...	3	3½	0	6						
„ menth. pip. ...	3	9½	0	6½						
„ morrhue ...	4 <i>s.</i>	1 <i>d.</i>	pint							

Appliances.

Indiarubber bandage, 2½ in. by 5 yd., 4*s.* 3*d.* each; 2½ in. by 7½ yd. 5*s.* 7*d.*
Elastic Web, 3 in. wide, 1*s.* 1*d.* per yd.
Arm splints, plain, 8*d.* each.
Catheters, best brown G.E., 9*d.* each; soft rubber, over 12, 1*s.* 4*d.* each.

ITALIAN QUICKSILVER.—During 1917 the exports from Italy were 1,115,500 kilos., against 766,500 kilos. in 1916 and 853,200 kilos. in 1915.

SULPHITE SPIRIT COMBINE.—A number of Swedish cellulose-factories have combined to form an undertaking for the production of alcohol from sulphite-pulp. The shortage of benzene in most neutral countries lends great importance to the scheme. A number of sulphite-spirit factories are ready. In the course of 1918 nine more factories will be opened, and five during 1919, when a yearly product of 20,000,000 litres will be attained. During 1913 25,000,000 litres of benzene was imported into Sweden, so that a large proportion of this can be replaced by home production.

Profit, Percentages, and Discounts.

By John Humphrey.

Notes of a Lecture delivered at the Progressive Pharmacy Club on July 2, 1918.

(Concluded from p. 535.)

PROFIT.—Reverting to the meaning of the word "profit," it must be recognised that in its ultimate sense it implies the net gain to the individual after covering not only the prime or initial cost, but also the entire supplementary cost represented by the expenditure of money or effort in the business of selling. But the word "profit" is much employed in a more or less limited sense, as when it is applied to the difference between the purchase price and the selling price of an article. Something is bought at ninepence and sold at a shilling, and the result is said to be a "profit" of threepence. This, however, is not actual profit, inasmuch as the due proportion of overhead charges has not been added to the purchase price, and a proportionate reduction must therefore be made from the alleged profit. It is essential to discriminate between the purchase price and the cost price of goods, the former being only the prime or initial cost, less any discount, while the actual cost price is the net purchase price *plus* a fair proportion of the overhead charges of the business. As a corollary, it must be stated that it is the excess of the selling price over the actual cost price which alone constitutes real profit.

As a means of distinguishing between real and apparent profit, it is customary to speak of the former as "net" profit, and of the latter as "gross" profit. If the "gross" profit is not sufficient to more than cover a fair proportion of the working expenses of the business, there is really no profit whatever on the transaction. Then again, it is common to see references to "profit on outlay or cost" and "profit on sales or takings"—both very different things and neither, as generally used, representing real profit. By "profit on outlay or cost" is meant the proportion added to the initial cost in order to arrive at the selling-price; by "profit on sales or takings" is usually meant the proportion of the selling-price which represents "gross," not "real," profit. An addition of fourpence to an initial cost of one shilling is said to give a "profit on outlay or cost" of one-third, or a "profit on sales or takings" (that is to say, an actual "gross" profit) of one-fourth, from which a due proportion of the overhead charges of the business must be deducted before the "net" or real profit can be ascertained.

PERCENTAGES.—Turning to the subject of percentages, there are two things to learn in this connection—what is meant by percentage of profit, and how to calculate percentages. By percentage of profit may be understood either percentage of net profit or percentage of gross profit, and in the case of the latter a further differentiation prevails, inasmuch as reference is frequent to percentage of profit on capital outlay or cost, and percentage of profit on sales, takings, or turnover. Now it must be insisted that "percentage of profit" should be understood, primarily, to mean percentage of net profit, calculated on the selling price; and that "profit on cost," used without qualification, should invariably be understood to apply to total or actual cost. But the use of the second expression with some qualification, as when it means profit on the purchase price, is much more common, and no serious exception need be taken to such use, provided always that the qualification is sufficiently clear to prevent any confusion as to what is actually meant. If, in the course of any discussion, percentage of profit is referred to, argument should be suspended and comment withheld until it is known whether the profit under consideration is net or gross profit; and if—as will probably prove to be the case—the latter, whether the percentage is calculated as an addition to prime or initial cost—i.e., to the purchase-price—or as a proportion of the selling-price.

If the purchase-price of an article is one shilling and it is sold at one shilling and fourpence, the gross profit to the

seller is fourpence; that is to say, one-fourth of the selling-price or the equivalent of one-third of the purchase-price, is gross profit. Expressing these proportions as percentages, it will be seen that the seller's gross profit is 25 per cent. of the selling-price, or the equivalent of 33½ per cent. on the purchase-price. Similarly, a gain of threepence on an article purchased for a shilling would represent a gross profit of 20 per cent., or the equivalent of 25 per cent. on the purchase-price, while a gain of sixpence on the same article would give the seller a gross profit of 33½ per cent., or the equivalent of 50 per cent. on the purchase-price.

In all the foregoing instances the word "equivalent" is used deliberately in the references to purchase-price, because the so-called percentage is arrived at by making an addition to the number representing the purchase-price, bringing that number up to a hundred, whereas a true percentage must be a proportion of the number on which the percentage is based—either part of a hundred or an addition to a hundred. Thus, while it is quite correct to speak of so many hundredths of the selling-price of an article as the percentage of profit gained by the sale of that article, the so-called percentage of profit on the cost of an article represents, strictly speaking, the proportion or number which must be added to the purchase-price in order to make up a total of one hundred. Hence it is more exact to speak of the proportion of gross profit to cost as the "equivalent" of a certain percentage on the cost price or purchase-price, though for the sake of brevity the word "equivalent" may usually be omitted.

RULES.—In using rules for calculating percentages of profits let it be clearly understood what is meant by "cost" or "cost-price," or wrong impressions may be conveyed by the results obtained. As employed in the rules and tables that follow, "cost" may be interpreted as either initial or actual cost.

A simple rule for finding the percentage of profit on cost is to multiply the number representing the profit in pounds, shillings, pence, or farthings by one hundred, and divide the product by the number representing the cost in money of the same denomination. Thus, say the cost is one shilling and the sale price one shilling and sixpence; the profit on cost is sixpence. Expressing both cost and profit as pence, the problem may be set out as follows:—

$$\frac{6 \times 100}{12} = \frac{600}{12} = 50 \text{ per cent.}$$

The percentage of profit on sales is readily found by multiplying the number representing the profit by one hundred and dividing the product by the number representing the sale price. Thus, in the case of an article sold at eighteenpence, with a gain of sixpence to the seller, the following shows the result:—

$$\frac{6 \times 100}{18} = \frac{600}{18} = 33\frac{1}{3} \text{ per cent.}$$

In the following table are shown the percentages of profit on cost and sales respectively, which are obtained by adding to the cost price the proportion represented by the fraction given in the first column:—

Addition to Cost	Percentage on		Addition to Cost	Percentage on	
	Cost	Sales		Cost	Sales
$\frac{1}{2}$ cost	50.00	33.33	$\frac{1}{2}$ cost	8.33	7.69
$\frac{1}{4}$ "	33.33	25.00	$\frac{1}{3}$ "	7.69	7.14
$\frac{1}{8}$ "	25.00	20.00	$\frac{1}{4}$ "	7.14	6.67
$\frac{1}{16}$ "	20.00	16.67	$\frac{1}{5}$ "	6.67	6.25
$\frac{1}{32}$ "	16.67	14.29	$\frac{1}{6}$ "	6.25	5.88
$\frac{1}{64}$ "	14.29	12.50	$\frac{1}{7}$ "	5.88	5.55
$\frac{1}{128}$ "	12.50	11.11	$\frac{1}{8}$ "	5.55	5.26
$\frac{1}{256}$ "	11.11	10.00	$\frac{1}{9}$ "	5.26	5.00
$\frac{1}{512}$ "	10.00	9.09	$\frac{1}{10}$ "	5.00	4.76
$\frac{1}{1024}$ "	9.09	8.33	$\frac{1}{12}$ "	2.56	2.50

The amount that must be added to the cost-price in order to produce a definite percentage of profit on sales may be ascertained by multiplying the number representing the cost by that indicating the required percentage, and dividing the product by one hundred minus the required percentage. Thus, in the case of an article

costing one shilling, on the selling-price of which it is desired to make a profit of 25 per cent.—

$$\frac{12 \times 25}{100 - 25} = \frac{300}{75} = 4.$$

That is to say, fourpence must be added to the price of the article in order to realise a profit of 25 per cent. on sales.

A modification of the same rule serves to show the proportionate amount that must be added to the cost-price, expressed in hundreds of pounds, shillings, or pence, in order to produce a definite percentage of profit, the required percentage being multiplied by one hundred, and the product divided by one hundred minus the required percentage. Thus, to produce a profit of 17 per cent. :—

$$\frac{17 \times 100}{100 - 17} = \frac{1700}{83} = 20.48.$$

That is to say, 20.48 pounds, shillings, or pence must be added to each 100 in the cost price in order to show a profit of 17 per cent. Some results of the application of this rule are shown in the following table :—

Addition to Cost	Profit Realised	Addition to Cost	Profit Realised
Per cent.	Per cent.	Per cent.	Per cent.
2.56	2.50	19.04	16.00
5.26	5.00	20.48	17.00
6.38	6.00	21.95	18.00
7.53	7.00	23.45	19.00
8.70	8.00	25.00	20.00
9.89	9.00	33.33	25.00
11.11	10.00	42.85	30.00
12.36	11.00	50.00	33.33
13.63	12.00	53.85	35.00
14.94	13.00	66.67	40.00
16.27	14.00	81.81	45.00
17.64	15.00	100.00	50.00

It will be noted that the actual profit realised by doubling the cost-price is exactly 50 per cent., and not 100 per cent., as some people are fond of expressing it. The profit is "equivalent" to 100 per cent. on cost, but that is a very different thing from 100 per cent. profit. As a matter of fact, it is impossible to obtain 100 per cent. profit unless the actual cost of the article is nil. An article sold at one hundred times its actual cost realises a profit of 99 per cent., an article sold at one thousand times its cost realises a profit of 99.9 per cent., and an article sold at ten thousand times its cost realises a profit of exactly 99.99 per cent., no more and no less. On the other hand, if an article is received as a gift or found, and it can be sold without any expense being incurred by the seller (a state of affairs only ideally possible), an actual profit of 100 per cent. will be realised whatever the price obtained—whether a penny, a shilling, a pound, or more! In other words, 100 per cent. profit is only realised when the selling-price is all profit.

The rule showing how much to add to cost in order to produce a definite percentage on profit of sales may be usefully supplemented by a further rule, showing what amount must be added to cost in order to produce a definite percentage of profit on that cost. If the cost is 12, and it is desired to add a profit of 25 per cent., multiply the cost by the required profit and divide by 100, thus :—

$$\frac{12 \times 25}{100} = \frac{300}{100} = 3.$$

That is to say, threepence must be added to the price of an article which costs one shilling in order to realise a profit on cost of 25 per cent. But this, it must be remembered, is not actual profit, either net or gross, as would be the case if it were profit on sales. The actual profit is only one-fifth of the sale price, or 20 per cent.

Discounts.—On the subject of discounts there is little to be said, except that the greater the discount to be deducted, the less must obviously be the initial or prime cost of the article. In order to arrive at the actual cost of an article, the discount must be deducted before adding such proportion of the overhead charges of the business as is required before the total cost can be ascertained. Some-

times there are two, or even three, discounts to be deducted, but in such cases it is to be observed that only the first (usually the largest) discount is deducted from the gross amount of the account, and each successive discount is deducted in turn from a previously discounted amount. Thus if it be stated that the price of an article will be subject to discounts of 20 per cent. and 5 per cent., with an additional 2½ per cent. at settlement, it must not be assumed that the total discount will amount to 27½ per cent., since the 5 per cent. will only be deducted from four-fifths of the original amount, and the 2½ per cent. from only a trifle more than three-fourths of the original amount. Again, it must be remembered that any discount allowed to a customer automatically reduces the profit on the transaction, so that if it be desired to compensate for loss in this direction the amount of any discount to be allowed must be taken into account in fixing the selling prices of goods, just as possible bad debts, damage to stock, and other incidental causes of loss must be taken into account in calculating the working-expenses of a business. In order to cover a discount of 2½ per cent., an addition of 2.56 per cent. must be made to the normal selling-price, while a 5 per-cent. discount will require a prior addition of 5.26 per cent., as shown in the tables of percentages.

In conclusion, it should now be clear that profits are necessary, in the first place, to provide the means of livelihood to the seller; and, secondly, to enable a business and its proprietor to progress. Without sufficient profits to cover the entire cost of conducting a business, including the proprietor's living expenses, the business cannot long be carried on except at a loss, and bankruptcy will only be a question of time. Further, without adequate surplus profits progress will be impossible, both in the case of the business and in that of the proprietor, for it must be borne in mind that it is surplus profits which provide extra capital for developing the business in the least expensive manner, and it is also surplus profits which enable the proprietor to enjoy more than the bare necessities of life. So far as the relationship of price to profit is concerned, the distinctions that have been made between cost and profit, supplemented by the various rules for calculating profit, should enable anyone to form clear ideas as to what the relationship is, provided always that it is thought worth the trouble to think the matter out.

POSTSCRIPT.

Consideration of profit as interest on principal has been purposely avoided in the foregoing remarks, though in the financial world, and in big business generally, profits are usually derived from or computed upon investments. This accords with the method of reckoning profit on capital outlay or cost; but, as has been shown, the difficulty in retail business is to arrive at the actual outlay or cost, and that is why the computation of profit on sales is generally the more satisfactory method for ascertaining the net gain to the individual.

Pharmaceutical Examination Results.

THE following candidates passed at the July examinations held in Edinburgh:

Major Examination.

Marshall, Sarah C., Dalkeith

Minor Examination.

Aitchison, Margaret, Kilsyth	Hunter, Agnes D., Maxwell-town
Anderson, Edith M., Edinburgh	Irvine, Margaret T., Airdrie
Bird, Raymond P., Halifax	Laing, Helen H., Kirkcaldy
Boag, Agnes St. Clair, Gienock	MacPherson, G. H., Tain
Cargill, Catherine I., Arbroath	Ross, T., Lochgelly
Davison, J. H., Newcastle-on-Tyne	Scott, A. W., Paisley
Dougall, Elizabeth, McPhail, Glasgow	Stewart, Hawthorn, Paisley
Galloway, Isabella, Edinburgh	Stobie, Christina M. H., Cowrie
Grieve, Janet P., Glasgow	Webster, Elizabeth B., Drew
Hitchon, Annie M., Newtown	Wood, Helen W., Gifford

OPIMUM.—According to the Lloyd Ottoman (April 10) 665 decunums of opium were sown in the vilayet of Angora up to the end of February (1 decunum equals slightly under ¼ acre).

Trade Report.

42 Cannon Street, E.C. 4, July 11, 3 p.m.

BUSINESS in the general-produce markets does not show any improvement, owing to the conditions and restrictions which have hedged practically all commodities for many months past. The demand for several synthetic products during the past week has improved somewhat, owing to the so-called influenza epidemic. The sale of febrifuges, like aspirin, quinine, phenacetin, antipyrin-salicylate, and soda salicylate, has thereby been stimulated. Fortunately, there are good stocks of these pharmaceuticals, quinine alone excepted. Good arrivals of bromides (mostly potash) have taken place, and this salt is slightly easier. Hexamine and methyl salicylate are also easier, owing to arrivals. Phenacetin, barbitone, and resorcin have also moved in buyers' favour. Lithia carb., gallic and pyrogallallic acids are firm. Other changes include a reduction in yellow and red prussiate of potash and arsenic. Carbolic acid shows a recovery from the recent low level. Among drugs, etc., Para copaiba and balsam Peru are the turn easier. Java citronella oil is dearer, and turmeric has again advanced. Speculators in ginger have driven up prices considerably. Japanese vegetable wax is lower.

Higher	Firmer	Easier	Lower
Canary-seed	Anise oil, star	Balsam Peru	Agar-agar
Capsicums	Cloves	Barbitone	Arsenic
Cassia lignea	Mace	Bleaching	Methyl
Chillies		Powder	salicylate
Citronella oil		Copaiba	Potash
(Java)		(Para)	bicarbonate
Nutmegs		Hexamine	Potash prus-
Quinine		Phenacetin	siate (yellow
(sec. hands)		Potash	and red)
Terpineol		bromide	Wax veg.
Turmeric		Resorcin	(Japan)

Cablegram.

NEW YORK, July 11.—Business is quiet. Opium is lower at \$2.50. Sugar of milk has been advanced to 53c., and saccharin has advanced to \$32.00 for insoluble and to \$30.00 for soluble. Strychnine is dearer at \$1.80 per oz. for the pure alkaloid and at \$1.40 for sulphate.

ACETIC ACID is still being doled out in small lots in dilute form, the Government having to economise supplies for war-purposes. There is no prospect of any improvement in the supplies.

AGAR-AGAR is slow of sale and rather cheaper at 3s. 4d. to 3s. 6d. per lb. for No. 1 Kobe strip, and July-September shipment is offered at 3s. c.i.f.

ANISE.—Russian is quoted 77s. 6d. to 80s., and Spanish 140s. per cwt.

ANISE OIL, STAR.—Arrivals comprise 750 packages; spot prices of "Red Ship" brand are from 4s. 6d. to 4s. 7d. per lb., and near shipment has been sold at 4s. 3d. c.i.f.

ANTIMONY.—The question of securing shipping permits from the Far East seems hopeless, while the reply of the authorities to further applications is that licences can only be got by the Department directly interested. Very high f.o.b. terms are said to be cabled from China at between about 35% and 40% per ton, but there is of course no chance of arranging business without a licence, and even assuming the latter to be granted, the question of freight presents insuperable difficulties. The nearest quotation of spot lots is 50% per ton. Regular monthly shipping contracts of white oxide of antimony (licence free) are hung up entirely through the impossibility of getting ship room from China. Japanese freight is extremely scarce, and this gives an idea of the impediment surrounding Chinese exports of antimony. The only market on which that country can now depend is the United States, where good stocks are still held, but users' needs are on the increase.

ARSENIC.—The tendency of the market has fully justified our recent remarks. What with the dragging demand and the resale parcels coming on the market, prices have taken another dip, some business being possible down to about 94% per ton for Cornish powder, although agents quote up to 100% delivered London. Inferior Australian grade can be had at 93% and less. Merchants handling retail lots have come down considerably in their ideas, the top price mentioned in this direction for Cornish being about 105%.

ASPIRIN.—The demand has gradually improved, and the new prices are apparently being paid, best makes being obtainable at 12s. per lb.

BARBITONE.—Owing to the arrival of several consignments, the price has eased down to 105s. to 102s. 6d. per lb.

BENZOATES.—Benzoic acid is steady and unchanged at 19s. Benzoate of soda is in rather short supply, and it is to be regretted that the manufacture is not more readily taken up here.

BETANAPHTHOL.—Medicinal quality is offered at 7s. per lb.

BLEACHING-POWDER is easier, dealers offering at 17s. per cwt. in casks.

BROMIDES.—About 200 cases of the salts (chiefly potash) have arrived, partly on Government account, and these have been distributed among the druggists. Potash is now 10s. ammon. 11s. to 11s. 6d., and soda, which is on the scarce side, 5s. 6d. per lb.

BUCHU.—The exports from the Union of South Africa during March 1918 amounted to 24,905 lb. (3,605%), against 68,934 lb. (11,230%) in March 1917. During the three months ended March 31, 1918, the exports were 48,372 lb. (7,824%), against 89,314 lb. (14,622%) in the corresponding period of 1917.

CAMPOR is firm, with Japanese 2½-lb. slabs offering at 4s. 6d. per lb. and 4-oz. tablets at 5s. 6d. on the spot. To arrive, slabs are quoted at 3s. 6d. c.i.f.

CANARY-SEED must again be quoted dearer at 265s. to 270s. per quarter for ordinary to good Morocco.

CAPSICUMS were dearer at auction, 91 packages Nyasaland selling at 32s., including ordinary dark 64s. to 66s., and fair reddish dark 73s. to 78s.

CARAWAY OIL.—English rectified is quoted at from 24s. to 26s., as to seller.

CARAWAY-SEED is firm at 235s. per cwt. for Mediterranean quality, and at 225s. for shipment.

CARBOLIC ACID.—As a result of the recent reduction, several of the makers have sold their output until the end of the year, and the market now shows a recovery from its lowest, the value of 39° to 40° C. ice crystals in large drums being from 1s. 3d. to 1s. 4d. per lb. Export permits appear to be freely granted.

CASSIA LIGNEA is dearer, with spot sales at from 97s. 6d. to 105s. and broken at 87s. 6d. to 95s. on the spot.

CHILLIES were higher at auction. Of 126 bags Nyasaland 62 sold, including dark red 85s. to 88s., middling to good fair reddish 96s. to 114s.

CITRATES.—Present prices are: Potash citrate, B.P., 4s. 5d. to 4s. 6d.; sodium citrate, 3s. 3d. to 3s. 4d.; ferri et ammon. cit., B.P., 3s. 3d. to 3s. 4d.; ferri et quiniæ cit., 1s. 1d. to 1s. 3½d. per oz.; ferri et quini. et strychninæ cit., 1s. 9d. per oz.

CITRIC ACID.—The Camera Agrumaria have raised the price of citrate of lime by 20 per cent., and this advance is likely to be reflected in the price of citric acid later. Meanwhile 3s. 5d. is the spot price.

CITRONELLA OIL.—Ceylon in drums is firm at 3s. 6d. per lb., and Java in drums is dearer at 4s. 9d. on spot.

CLOVES are firmer, sales of fair Zanzibar having been made up to 2s. 5½d. and buyers.

CLOVE OIL.—The tendency is not quite so firm, English distillers offering finest distilled at from 20s. 6d. to 21s., as to quantity.

COD-LIVER OIL.—Our Bergen correspondent writes on June 26 that the Finmarken cod-fishing gave pretty fair results last week. The total of all the Norwegian fisheries up to June 22 is as follows:

	1916	1917	1918
Catch of cod (millions)	...	51.4	27.7
Yield of c.i.o. (hect.)	...	60,103	37,100
Liver for "raw" oils (hect.)	...	5,400	6,800

COPPER SULPHATE.—The speculative demand would seem to have been already satisfied, there being a disposition to await developments, having regard to the recent promise of applications for licences being considered. Terms temporarily eased again to about 65%, but rallied, nominally now being from 66% upward f.o.b. Liverpool, less 5 per cent. This is entirely due to the recent advance of 12% per ton in the cost of metallic copper. There is no reason why sulphate should be affected to any further considerable extent by the advance in copper, as the price did not yield a great deal when copper collapsed to 110% after the American price was first fixed last year.

CORIANDER-SEED.—Further sales of new-crop Morocco are reported at 33s. per cwt. c.i.f. terms.

CREAM OF TARTAR has been rather lifeless during the past week, the recent excitement having subsided; 415s. per cwt. is quoted for 99 per cent. powder.

CUMIN-SEED is very slow of sale and the quotation nominal at 50s. to 60s. per cwt. for ordinary to good sifted Morocco.

DILL-SEED is unchanged at 55s. to 59s. per cwt.

ETHERS.—Following on the advance in spirit last week,

present prices of pure are: s.g. 0.735, 8s. 6d.; s.g. 0.720 (for anaesthesia), 9s. 1d. Acetic ether is dearer at 11s. 6d.

ETHYL SALICYLATE is offered at the lower figure of 8s. per lb.

EUCALYPTUS OIL has been in good demand, and prices are steady, with spot stocks plentiful at from 2s. 4½d. to 2s. 6d. per lb., the latter for 70 to 75 per cent. eucalyptol.

FENTUGREEK-SEED has been sold at 33s. per cwt. c.i.f. terms for new-crop Morocco.

FORMALDEHYDE.—The American Government on June 13 fixed the price at 16½c. per lb. for shipment from works. This news is only of academic interest to this market owing to the Government control, and no supplies are available on the open market, or likely to be. The following is an abstract of a letter from a responsible firm of merchants which appears in the "Times" Supplement of July:

May we raise the question of the expediency of an Order prohibiting the importation of formaldehyde and transactions in the same about to be made by the Imports Restriction Department? Under this Order importation will be in Government hands entirely, and formaldehyde will be released at a fixed price in quantities of one barrel and upwards only to those able to show that they require it for approved purposes. Resale at a profit will be prohibited except in quantities of less than one barrel. This is tantamount to the stoppage of the whole functions of importer, broker, and merchant, so far as formaldehyde is concerned. It will create a Government monopoly in a commodity urgently required in trades by no means immediately concerned in munitions. Formaldehyde is used for a variety of important purposes as an agricultural disinfectant; as a raw material in the manufacture of aniline dyes, fine chemicals (aseptics), and domestic disinfectants; for disinfecting wool; for sterilising grain and malt; and in connexion with the storage of grain and with the manufacture of a diversity of products, such as sugar, certain electrical appliances, some kinds of leather, etc. This list shows the importance of the product and the complexity of the industry affected. . . . We suggest a joint representation in the proper quarter.

GALLIC ACID is firm at 6s. per lb. on the spot, the price of galls being very dear.

GINGER.—The recent advance appears to be due to speculation, and consumers are disinclined to take interest at the much higher level of prices now prevailing. Second-hand dealers offer good Jamaica at 140s., Calicut at 125s., and Cochin at 140s., which prices are much lower than these asked by Mincing Lane operators.

GUM ACACIA is quiet, with Kordofan sorts offering at 80s. to 82s. 6d. per cwt. on the spot, and cleaned at 85s.

HEXAMINE is rather cheaper owing to arrivals, importers offering at 9s. 9d. to 10s. per lb. on spot.

HYDROQUINONE shows no material alteration at from 17s. 6d. to 18s. net on spot.

JUNIPER-BERRY OIL.—Foreign distilled of B.P. quality is quoted at from 32s. to 35s. net as to seller, and juniper-wood oil at 10s. to 11s. net.

LIME-JUICE is steady at from 3s. 9d. to 4s. 6d. per gal. for raw West Indian, as to quality.

LITHIA CARBONATE.—Makers are well sold, and only second-hand parcels appear to be available from the United States at higher rates, so that it is not possible to buy on spot at under 11s. per lb.

MADE was firmer in auction, 24 boxes Penang selling at 3s. 5d. per lb. for fair.

MENTHOL.—Quiet, with Kobayashi offering at 14s. and Suzuki at 13s. 10½d. on spot. For April-June shipment either brand is quoted at 13s. 6d. c.i.f.

METHYL SALICYLATE.—Several fair-sized consignments having arrived, the price seems to have been knocked down in anticipation thereof, and there are now sellers at 9s. 6d. per lb. on spot. A New York advice, dated June 13, reports that some large purchases have been made for export, and spot stocks have been pretty well cleaned up; 85c. is still quoted.

MILK-SUGAR.—Buyers continue very reluctant to pay the present inflated prices asked by dealers, preferring to let their stocks run down. America has released several further shipments to this country, and this ought to relieve the position later. A New York advice, dated June 13, reports a very light supply; 50c. to 52c. per lb. is quoted for spot delivery, and it is difficult to obtain even small quantities.

MINT OIL.—Japanese dementholised has been selling more freely on the spot at from 3s. 8d. to 3s. 10½d. per lb., as to brand; for June-August shipment Kobayashi is quoted at 3s. 6d. c.i.f.

NUTMEGS were dearer at auction, 20 boxes Penang selling at 3s. 6d. per lb. for 80's.

NUX VOMICA.—Spot sales of good bold have been made at 75s. per cwt., and to arrive a fair business has been done in Madras seed at from 57s. 6d. to 60s. c.i.f.

PARAMIDOPHENOL HYD. is offered at 15s. per lb.

PEPPER is quiet, with sellers of fair black Singapore at 1s. 9d., fair Tellicherry at 1s. 10d., and Aleppy at 1s. 9½d. White Muntok is 3s. 3d., and Singapore 3s. 2½d. per lb. on spot.

PEPPERMINT OIL.—American oil in tins is still scarce, limited quantities offering at 22s. 6d. net and H.G.H. at 32s., London terms. Prices of English vary from 76s. to 85s., as to seller.

PHENACETIN.—Dealers seem to be cutting their losses, and in their eagerness to sell offer at 21s. per lb. on spot.

PHENAZONE, unlike phenacetin, is not subject to keen competition, and buyers who have been endeavouring to purchase at 42s. may have to pay appreciably more, as the manufacture in Switzerland is below normal on account of fuel difficulties.

PHENOLPHTHALEIN is available at from 47s. 6d. to 50s. per lb. on spot.

PHOSPHORIC ACID.—Concentrated (s.g. 1.50) is higher at 1s. 9d. per lb.

PIMENTO is quiet, with sellers at 6d. per lb. on the spot.

POTASH BICARBONATE.—B.P. quality is rather lower at from 1s. 9d. to 2s. per lb.

POTASH IODIDE.—The exports from Japan during March amounted to 14,645 kin, valued at 85,577 yen. During the three months ended March 31 the exports were:

		1916	1917	1918
Kin	...	41,318	27,788	42,326
Yen	...	305,972	171,308	252,686

Of crude iodine the exports in March were 8,723 kin, valued at 59,423 yen. During the three months ended March 31 the exports were as follows:

		1916	1917	1918
Kin	...	150	3,822	19,636
Yen	...	722	33,477	123,503

POTASH PRUSSATE.—The British Cyanides Co. (Ltd.) announce a reduction in yellow prussiate of 6d. per lb., quoting 2s. 9d.; red prussiate has been reduced by 1s. to 7s. per lb., both f.o.r. their works Oldbury.

PYROGALLIC ACID is offered at 15s. 6d. for crystals, and at 17s. for resublimed.

QUICKSILVER.—Buying is very difficult, and the terms asked generally are rather stiffer, these ranging from about 22l. to 24l. per bottle. There is a strong demand across the Atlantic. Every effort is made there to make the most of the mine resources in order to protect Government requirements, which are evidently on a growing scale. Certain improvements have been effected at the New Idria Mines, including use of electric power instead of gas and oil engines in mining, and the erection of a new type of smelting plant. The prospects of the company are that last year's output of 11,000 flasks will be materially increased. The New Idria contributed over 30 per cent. of the United States production of 1917. It is stated that 40 per cent. of the company's output is reserved for the Government, which recently fixed the price at \$105 of 76½ lb., while no restrictions have been made on price to be received for the remaining 60 per cent. Prices in the open market thus vary considerably up to about \$120. Lately a new use has been found in making up an anti-fouling substance to remove barnacles and seaweed from immersed portions of vessels.

QUININE has continued in demand, and sales have been made from dealers' hands at up to 3s. 9d. per oz. for sulphate on the spot. Stocks have now been depleted, but fairly good consignments are on the way from Java. Buyers are securing supplies ahead, and as the consignments come to hand they will be urgently wanted.

A New York advice, dated June 13, states that consumers have been buying heavily in the outside market, as they have apparently been able to get very little from the makers; \$1.03 to \$1.05 has been paid for Java, while \$1.05 to \$1.10 is quoted for American.

Among the economic demands made by Germany on Holland is "quinine from the Dutch Indies free of the Netherlands Oversea Trust conditions."

RSORCIN is rather more plentiful, and can be had at 42s. 6d. per lb. on spot. New York (June 13) reports a lower market at \$7.50 to \$7.75.

RHUBARB.—Rough round Chinese of rhapontica type is offered at from 9d. to 1s. per lb., and is getting scarcer.

SACCHARIN.—There is still a good demand for uncontrolled saccharin, the prices of which vary from about 392s. 6d. to 397s. 6d. per lb., duty paid, for 550 pure on the spot. To arrive, business has been done at 260s., duty unpaid. Fair arrivals have taken place from the United States, the bulk of which is for delivery ex contract. Permits for fresh importations are still being granted.

SALICYLATES.—About 4s. 3d. per lb. represents current spot value of B.P. salicylic-acid powder. Sodium salicylate has been a good demand, powder offering at from 6s. 3d. to 6s. 6d.

SALOL is more inquired for, but rather scarce at about 10s. on spot.

SASSAFRAS OIL.—A limited quantity is obtainable at 21s. 6d. net on spot.

SHELLAC remains quiet, with usual standard TN Orange quality offering at 340s., and cakey A.C. Garnet at 330s. on the spot.

TERPINEOL is dearer at 8s. per lb. on the spot.

THYMOL, ex ajowan seed is offered at 47s. 6d. on spot.

TURMERIC.—With no arrivals and no c.i.f. offers spot prices continue to advance, Madras finger offering at 115s. to 125s. spot, Cochín split bulbs at 75s., and finger at 92s. 6d.

TURPENTINE is steady at 116s. for American on spot.

WAX, VEGETABLE.—Fair-sized quantities of Japanese have arrived, and spot prices are lower at 123s.; to arrive, August-October shipment is quoted at 119s. c.i.f.

WOOD OIL.—Prices of Chinese have reached an exceptionally high level on spot—about 165s. per cwt.—and owing to lack of freight it is difficult to say when further shipments will take place.

Independence Day on 'Change.

In reply to the cable sent by Mr. J. W. Drysdale from 'Change as from the drug, chemical, and allied trades to President Wilson (*C. & D.*, July 6, p. 50), the following telegram has been received by Mr. Drysdale from Mr. Irwin Laughlin, Charge d'affaires, U.S. Naval Headquarters, London: "I have just received a telegram from the President asking me to express his appreciative acknowledgment and hearty thanks for your message of the Fourth of July, which reached him in Washington."

Arrivals of Chemicals, Drugs, etc.

The following arrivals have taken place at the ports of London and Liverpool during the period named below. Particulars of imports of oils, oilseeds, nuts, fats, gums, honey, etc., are not now published.

To London (June 22 to 28).	To Liverpool (June 24 to 29).
Bronze powder, 23 cs.	Valerian - root, 100 bgs.
Canary-seed, 95 bgs.	Dyestuffs, dyeing and tanning materials, etc., unrated, 43 pkgs.
Chemical products, etc., unrated, 28 pkgs.	1 cs.; cutch, 1,275 cs.; gambier, 2,053 cs.; 8 bgs. 255 pkgs.; indigo, 25 cts.; myrobolans, 4,743 bgs.; myrobolan ext., 57 cks.; tanners' bark, 128 tons; wattle-bark, 61 tons
1 cby. 2 drms.	Gelatin, 1,160.
Arsenic, 75 cwt.	Lithopone, 200 brls.
Barbitone, 10 cs.	Loofahs, 1,022.
Benzaldehyde, 7 cs.	Perfumery; : brilliantine, 287; pomades, 2307; rose-water, 297; synthetic products, 2,6307; toilet-cream, 3697; toilet-powder, 1,4017.
Bromide: potash, 60 cs.	Plumbago, 143 cks. 88 brls.
Caffeine, 5 cs. and 2307.	Soap, toilet, 307.
Calcium acetate, 12 cs.	Starches (cwt.); cassava, 257; farina, 10,873; potato, 12,380
Cream of tartar, 386 pkgs. 5 cks. 20 brls.	Talc, 5007.
Creosote carb., 4 kgs.	Wax, bees', 278 pkgs. 83 bgs. 26 bls.
Guaiacol carb., 10 kgs.	Wax, paraffin, 8,325 cwt.
Iron valerianate, 2 cks.	Wax, vegetable, 321 cs.
Methyl acetone, 20 drms.	Zinc oxide, 25 cs.
Phenacetin, 40 cs.	
Phenazone, 10 cs.	
Potash carb., 168 cs.	
Saltpetre, 1,000 cwt.	
Soda hyposulph., 10 tons	
Strychnine nitrate, 1 cs.	
Tannic acid, 20 bgs.	
Terpineol, 7 cby.	
Verdigris, 6 cks.	
Dental goods, 9517.	
Drugs, etc.: herbs, dried 148 bls., 11 bgs.	
Anise, 39 bgs.	
Belladonna - leaves, 8 bls.	
Cumin seed, 1,710 pkgs.	
Dog grass, 26 bgs.	
Ergot, 7 bgs.	
Gamboge, 30 cs.	
Gentian, 82 bgs.	
Rosemary, - leaves, 27 bgs.	
Sarsaparilla, 50 bds.	
Spike - lavender flowers, 26 bgs.	

ITALIAN OLIVE OIL.—During 1917 the exports from Italy amounted to 8,401,700 kilos., against 10,237,300 kilos. in 1916 and 41,267,900 kilos. in 1915.

CELLULOSE.—"Svenska Dagbladet" states that the urgent need for milled paper on the Continent has made so great a demand on the so-called "strong pulp" that the sulphate cellulose in Sweden is sold out for this year. As regards sulphate pulp, the market is very steady, and prices are at present about 350kr. per ton net cash f.o.b. to Swedish export ports.

Westminster Wisdom.

By the "C. & D." Parliamentary Representative

SUPPLIES OF CALCIUM CARBIDE.

It was stated in the House of Commons on July 4, that arrangements are being made to release a limited quantity of calcium carbide each month, which will be available for use by private consumers.

INVALIDS' RATIONS.

Rheumatoid arthritis is not one of the diseases in the treatment of which extra rations can be recognised by Food Control Committees, said the Parliamentary Secretary to the Ministry of Food.

THE LUXURY-TAX.

All the four Sub-Committees (writes our Parliamentary correspondent) of the Select Committee on the Luxury-tax under the Budget proposals, which were appointed to draw up schedules of articles, have completed their investigations and presented their reports to the main Committee. These are now under consideration, and it is expected that Mr. Acland and his colleagues will be in a position to present their report to the Chancellor of the Exchequer in the course of the next few days. There is no foundation for the statement, which has gained wide currency, that Mr. Bonar Law proposes to abandon this form of taxation.

ROYAL ARMY MEDICAL CORPS.

Mr. Pennefather, on July 3, asked the Under-Secretary of State for War what qualifications are necessary to enable a man to be appointed a quartermaster and given a commission in the Royal Army Medical Corps; whether any Royal Army Medical Corps commissions have been given to schoolmasters, architects, and others as sanitary officers; and, if so, what are the qualifications necessary for the holding of such commissions.

Mr. Macpherson replied that appointments of quartermaster in the Royal Army Medical Corps are usually reserved for qualified warrant officers and non-commissioned officers and ex-warrant officers and non-commissioned officers of the Royal Army Medical Corps. In the early part of the war, owing to there being an insufficient number of Royal Army Medical Corps candidates, a limited number of other persons were appointed. The officers of sanitary companies must be conversant with sanitary science, but need not necessarily be medical men.

MILITARY SERVICE.

The following statement by the Minister of National Service was made in the House of Commons on July 8: The following classifications are to be introduced for men of the new military age with regard to their fitness for military service. In future men of these ages passed by Medical Boards as fit for Grade 1 will be classified as Grade 1 (B1). Similarly, men of these ages passed as fit for Grade 2 will be classified Grade 2 (B2), and those passed as fit for Grade 3 will be classified as Grade 3 (B3). These classifications will be distinctly marked on the grading cards. Instructions will be immediately issued by the Local Government Board to Tribunals that, in considering the relative military value of Grade 1 (B1), they must assume these men are "not fit to be trained for first line infantry," and that in considering the relative military value of men in the new classifications, Grade 2 (B2) and Grade 3 (B3), they must assume that they are of substantially less military value than men under the previous Military Service Acts who were placed in Grade 2 or Grade 3 respectively. Instructions will be given to each National Service Representative that if and when requested by a Tribunal he shall state whether a man placed in Grade 3 has been found by the Medical Board to be fit only for sedentary work. The Minister of National Service has issued instructions that no notice calling up a man of the new ages for service was to give shorter notice than fourteen days, nor was it to be issued until ten days after the date upon which the man was due to report for medical examination. He had also instructed all Directors of National Service to see that the unauthorised use of books which recruits were asked to sign at Medical Boards, stating that they were satisfied with their examination, was to be discontinued, and that he had prohibited the adoption of any practice of this nature. It was agreed that greater publicity should be given to the opportunity of every man to apply for a second examination by a National Service Medical Board if he were dissatisfied with his first examination, and, further, that attention should be drawn by means of a printed intimation enclosed with the notice to report himself for medical examination to the limit of five days within which he may apply to an Appeal Tribunal for permission to be examined by the appeal medical assessors.



Pharmacists and Military Service.

SIR,—May I beg for a little space to refer to "Xrayser II." paragraph on the above question in the *C. & D.*, July 6, p. 41? He there refers to the abysmal ignorance of Tribunals of the status and responsibilities pertaining to the chemist and druggist. I suggest that the present is an opportune time for Secretaries and members of Pharmaceutical Committees who are appointed to confer with Clerks and members of National Health Insurance Committees, and possibly appear before Tribunals, to give the necessary instruction and point out with no uncertain voice that the chemist's responsibilities do not end with N.H.I. work, ordinary dispensing, and the sale and compounding of poisons, but that the public are entitled to the services of the experienced chemist, who shall take care that when he is asked for Epsom salts he does not supply zinc sulphate or oxalic acid.

Nottingham.

Yours truly,

E. S. WARING.

SIR,—I am sorry to again trespass upon your space, but the seriousness of the position seems to warrant it. The trouble appears to be as follows: In most areas, apparently, the Insurance Committee appoints a Sub-Committee. The Pharmaceutical Committee also appoints a Sub-Committee. After a meeting between these two Committees the former goes forth to do battle with the National Service Representative, and, be it noted, with no pharmaceutical armour whatever to protect it. From what I can ascertain, it frequently returns badly mauled by the aforesaid N.S.R., in consequence of which pharmacists get a good deal less than justice. The solution would appear to lie in Insurance Committees using their powers under the Insurance Acts with regard to the appointment of Sub-Committees. Equal representation could be accorded the Pharmaceutical Committee under those powers on the Military Service Sub-Committee which meets the National Service Representative; and the outcome, in the case of a duel between the National Service Representative and the Secretary of the Pharmaceutical Committee, with the Clerk of the Insurance Committee acting as "honest broker," would be something approaching justice.

Codnor.

Yours faithfully,

CLEMENT W. RIDYARD.

Reconstruction.

SIR,—With reference to the question of trade after the war, although some of the great industries have succeeded in getting temporary protection, apparently nothing has been done for the hundreds of manufacturers who have started making British substitutes for German goods. Such infant industries in the aggregate will go to make up many important commercial developments, reducing imports and increasing exports. These enterprises have been started since the war, and manufacturers, on profit-sharing principles, are paying the workers very much higher wages than pre-war, giving them the opportunity of improving their surroundings, which, with better education, must raise their ideals and mode of living: but how are they going to continue to pay the same wages if, directly peace is declared, they are again subjected to "dumping" and unscrupulous competition subsidised by the German Government and supported by their banks? Nothing definite has come of the Paris Resolutions. In the absence of Government action, what is wanted is a continuance of the invaluable support of the Press, plus the intelligent interest of the working-classes themselves, in a question which is a matter of national importance, and should have nothing to do with politics. The middle-classes equally with the working-classes are growing tired and suspicious of the old pre-war delays and unpatriotic indifference when immediate legislation is both possible and required. These two classes have now a common object in preventing what they begin to suspect is the deliberate blocking of progress, either by pro-German influence or by certain underpaid Government official classes who are compelled to live on low, fixed incomes, now quite inadequate to the responsibilities of their positions, and who should not be tempted to prefer foreign cheapness to British industrial prosperity. Everyone wishes to support a strong Government, but, far from leading, the Government is not yet keeping pace with the country in the economic prosecution of the war and reconstruction.

Yours faithfully,

For CAMWAL, LTD.,

F. G. PIRIE, Director and General Manager.

London, N.

A Kirkpatrick Memorial.

SIR,—Might I emphasise the suggestion made by "Xrayser II." (*C. & D.*, July 6, p. 41) on the memorial for fallen heroes from the West Ham district to build a new wing to Queen Mary's Hospital? It was the last project with which Mr. Kirkpatrick was associated, and just before his death he was giving me an enthusiastic description of the efforts he was making to realise his ambition of giving a worthy donation from pharmacy. One shilling each from those who voted for him at the last election would make his project sure, and at the same time show some appreciation of a man who spent himself in the cause of pharmacy. Contributions should be sent to Mr. W. Potter, High Street, Plaistow, E.

Yours faithfully,

HERBERT SKINNER.

A Manchester correspondent (8/7), writing in regard to the late Mr. Jas. Kirkpatrick, recalls that he was formerly in business at Taunton, and on selling the Taunton business was occupied in dispensing at the local hospital and with a firm of doctors. He was on the Town Council for about twelve years. Our correspondent sends us some interesting particulars regarding the political activities of Mr. Kirkpatrick, which show that in his earlier years there existed the aptitude for organisation which was developed on behalf of panel chemists in the West Ham area.

The Influenza of 1890 and 1918.

SIR,—Referring to various articles comparing the influenza of 1890 with the present epidemic, it may interest your readers to know that I visited America in 1884 and made purchases of gelatin-coated ovoid pills. They were practically new to this country, and I also bought largely of quinine and einchonidine. The quinine sold immediately, but the einchonidine remained on a top shelf year after year, taken at each stocktaking at 25 per cent. below the previous year, so that when the influenza year of 1890 came the einchonidine pills were useless, only occupying shelf-room. I got these piles of beautiful square amber bottles down, relabelled them "Influenza Pills," offered them at an attractive price which was about 100 per cent. above the original cost in 1884, and within a week was out of stock. I also required all employés to take a glass of quinine wine daily. By these means I got rid of useless stock and got along without a single case of the "flu." Things have changed greatly since then, but if anyone is burdened with similar pills they might do worse than follow my example, and employers of labour would certainly benefit themselves by similarly looking after their employés.

Faithfully yours,

10 City Road, E.C. 1.

J. LORIMER.

Weighing-machine Proceeds.

SIR,—Referring to suggestion made by Messrs. Sangers in last week's *C. & D.* of devoting the proceeds of weighing-machines during August to St. Dunstan's, I trust this will be taken up by each Association in London. If any pharmacist in the Western area will help in this splendid work and will communicate with me I shall be pleased to forward collecting-box and card.

Yours faithfully,

110 Mill Lane, London, N.W. 6.

C. A. NOBLE.

Sugar Dilution.

SIR,—Everyone will have noticed that sugar is not so sweet as it used to be. I have noticed in particular that the cubes obtained in the ordinary way from the grocer are not so sweet, weight for weight, as that which I obtain of a well-known brand for pharmaceutical purposes. Does anyone know how the trick is worked? The cubes in question look almost identical. Is it done, perhaps, by crystallising some added glucose as diluent with the beet-sugar, or is it merely that this grocer's sugar is less refined?

Yours truly,

INQUISITIVE. (91/10.)

American Cannabis.

Mr. John Lorimer, 10 City Road, London, E.C. 1, writes: "Your editorial on cannabis indica (*C. & D.*, July 6, p. 42) overlooks the fact that so long ago as October 13, 1917, you called your readers' attention to the importation of cannabis indica grown in U.S.A. under Government supervision, quantities of which I had imported and held in this country. Its appearance at the drug-sales 'was an unlooked-for possibility,' as you state, but it was no novelty, as your article implies."

Southampton Worthies.

SIR,—A slight error has crept into the report of Mr. Bates's address on "Some Memories of the Past" (*C. & D.*, June 29, p. 45). Mr. Chipperfield founded the business at Shirley; his cousin, Mr. E. Jeeves, succeeded him; and my father bought it from Mr. Jeeves.—Yours truly,

Southampton.

F. B. WRIDE.

Subscribers' Symposium.

For interchange of opinion among "C. & D." readers, and brief notes on business and practical topics, especially new ideas.

Highly Polished Gems.

Parce (121/97) writes: The following gems of English literature should not be allowed to shine unnoticed in the official organ of the Pharmaceutical Society. Of Mr. Glyn-Jones it is written that the "Anti-cutting Record" "will always remain a striking illustration of Mr. Glyn-Jones's splendid powers of initiative, moral courage, and genius for organisation in the face of apathy and opposition that might well have daunted and discomfited a less resolute and resourceful man." Of Mr. Giles it is stated, "Both by precept and example Mr. Giles has striven strenuously and consistently to bring home to men's bosoms and business the salutary but neglected principle in pharmacy, as in all lines of life, sound craftsmanship and true citizenship ought to have a reciprocal relationship if their concomitant progress and prosperity are to be ensured." And yet there is said to be a paper famine!

Legal Queries.

Most difficulties in trade law are explained in the legal section of "The Chemist and Druggist Diary," 1917, beginning on page 353.

Forsaken (121/3).—MILITARY SERVICE.—Your argument appears sound, but the Ministry of National Service may require you, a Grade III. man, to undertake substitute-service, so as to release a Grade I. man.

Camrac (121/56).—SACCHARIN TABLETS.—It is only tablets made from British saccharin that are sold at a controlled price. There is no fixed price for other saccharin tablets, which for some time now have been the only tablets readily obtainable.

C. I. (115/26).—There are no restrictions on the use of the figure of Britannia on labels; it is only the Royal arms and the Red Cross that have exceptional protection. Whether the Registrar of Trade-marks would accept a mark for registration which contained the figure of Britannia is another matter.

G. R. L. (122/6).—As you are in Grade III., your services are not likely to be required for the Army at present, and you should be able to resume your occupation as a qualified manager. Your appeal to the Tribunal should have been lodged within fourteen days after you were medically graded. The Ministry of National Service may require you to undertake substitute-service.

Hypo (117/63) ordered some goods from the manufacturers at the price he had been in the habit of paying for them. Without notifying "Hypo" of any advance in price, the manufacturers sent forward the goods, invoicing them at a considerably higher price. Is "Hypo" justified in returning the goods and declining to pay for them? [We understand that when ordering the goods "Hypo" stated definitely the price he was prepared to pay for them. If this is the case, he is, in our opinion, entitled to refuse to accept the goods at a higher figure, and may return them to the manufacturers without paying for them.]

Rojam (122/40).—MILITARY SERVICE.—So far as we understand the arrangement made between the Pharmaceutical Advisory Committee and the National Service Ministry, it concerns itself only with retail chemists as dispensers of medicine. We gather that you are engaged in a wholesale and manufacturing business, to which the scheme referred to in the *C. & D.* for the past few weeks does not apply. Chemists in manufacturing businesses are dealt with as being in either certified or protected industries, and in case you receive notice to undergo medical examination your proper course is to communicate at once with the Regional Officer of the National Service Ministry, pointing out your position.

Miscellaneous Inquiries.

M. & Co. (India) (122/18).—SOLIDIFIED SPIRIT.—The following is the method of solidifying methylated spirit: Melt 4.5 parts of stearin and then add to it 0.5 part of sodium carbonate (to saponify) and 95 parts of spirit, heating the mixture with proper precautions in a closed vessel for an hour. Colouring-matter may have been previously dissolved in the spirit. The finished mass is cut up into cubes or run into tin boxes ready for use.

E. M. (116/49).—We think you are wrong in assuming that glycerin is not used in the skin-creams to which you refer; the makers may have looked ahead and accumulated a small reserve of glycerin.

Mexico (91/9).—MATÉ.—Periodically the use is advocated in this country of maté as a substitute for tea. Maté is the dried leaf and young stalks of *Ilex paraguayensis*, a plant indigenous to South America, in which continent the product is very largely used for producing a beverage. Rather more maté is required than tea for the same quantity of beverage; it is infused in a similar manner to tea, the water being strained off after five minutes. Sugar can be added, and some prefer the addition of lemon-juice, orange-peel, tea, or coffee. Like tea, maté contains a considerable proportion of caffeine or theine, upon which it depends for its stimulating properties. The taste of the infusion is not usually acceptable in this country—it has been aptly described as similar to infusion of senna.

Veritas (11/6).—GREASE-REMOVING POWDER.—This is a form of sodium carbonate, possibly prepared by allowing the crystal salt to effloresce.

W. J. W. (121/19).—BOOKS.—*Prescribing*: Marshall's "Manual of Prescribing" (Churchill, 5s.); *Children's Diseases*: Freyberger's "Pocket Formulary" (Rebman, 6s. 6d.); Musket's "Prescribing and Treatment in Diseases of Children" (Pentland, 6s. 6d.). The other book you refer to we do not recognise, unless it is intended for Finlayson's "Clinical Manual" (Smith & Elder), of which the latest edition appears to be one dated 1891.

G. P. (121/48).—MANUFACTURE OF SUGAR OF MILK.—The following are the processes employed for the manufacture of sugar of milk: (1) The Swiss process consists in evaporating the whey to dryness, 50,000 litres yielding about 1,250 kilos. The solid obtained is dissolved in water at 65° C. in a copper pan, $\frac{1}{2}$ kilo. to 1 kilo. of alum added, the solution filtered through animal charcoal, boiled down to a syrup, and allowed to crystallise on cords or sticks. (2) Ramage's method consists in evaporating slightly alkaline whey to half its bulk, adding an acid to remove the casein, and then, after concentrating, precipitating the milk-sugar by adding spirit. (3) In Kennedy's process the milk is concentrated to between 11° and 27° Baume and the product chilled to 32° F. until the sugar crystallises. The crystals are removed by submitting the liquid to centrifugal action and washing with cold alkaline water.

X. Y. Z. (121/91).—BOTANICAL NAMES.—The scientific name of every plant consists, on the plan introduced by Linnæus, of two words, the first indicating the name of the genus and the second that of the species. Since in early times the same plants were often designated by identical names, it is necessary in systematic works, in order to avoid confusion, to append to the name of the plant the name of the botanist who is the authority for it. Abbreviations are generally used for the botanist's name, such as L. or Linn. for Linnæus, Wang. for Wangenheim, Michx. for Michaux, and Juss. for Jussieu.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," July 15, 1868.

The Pharmacy Bill.

Our medical contemporary the *Lancet* thus comments upon the Bill before Parliament:

"The principle of the new Poisons Bill which has passed the House of Lords is different from that which has generally been thought most likely to receive the approval of the Legislature. It has hitherto been imagined by many that some compulsory measure in regard to the keeping of all the more powerful, or the especially dangerous, medicines, would be the best means to guard against accident. The promoters of the new Bill, however, have gone upon the assumption that it is much better to rely upon enhanced intelligence on the part of dispensers as a whole. They have sought to debar persons from handling dangerous drugs until they have passed through such an ordeal as shall guarantee their being properly educated in pharmacy generally, and therefore presumably possessed of those qualities of care and forethought which are secured by scientific training. It was not until Government recognised this principle, indeed, that the commencement of a satisfactory solution of the matter was possible. At the same time, whilst we allow that at length a most proper course has been taken, we wish that the special value and general importance of incidental securities against mistakes may not be lost sight of."

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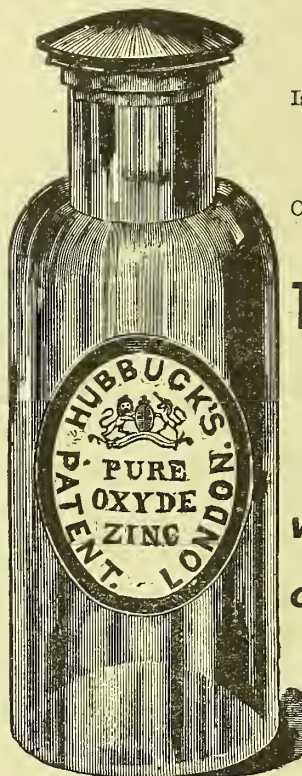
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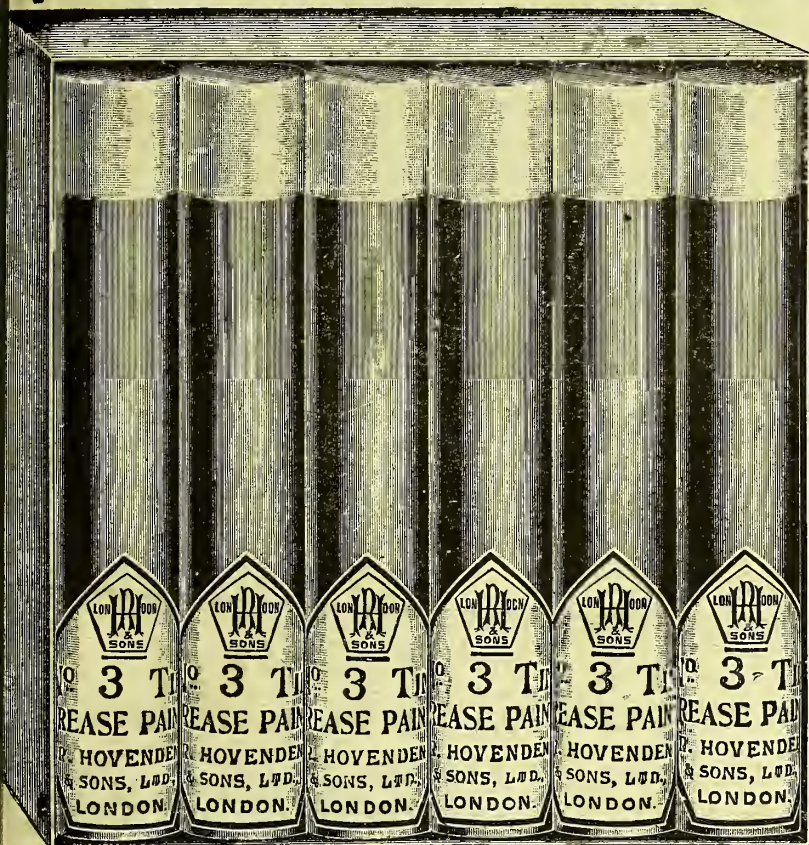
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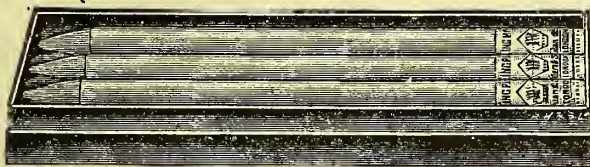
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7.—KENT (Within Easy Distance of Town).—Good middle-class Business; returns about £1,500; net profit £360; price, to include £90 book debts, £750; part payment.

8.—UNIVERSITY TOWN.—For disposal, through death, good-class Dispensing and Retail Business, which is in close proximity to several colleges; the gross receipts show a steady increase, last year's turnover being £1,234; to effect a speedy transfer about the value of stock and fixtures would be accepted.

9.—NORTH STAFFS.—Ready-money Retail, with little N.H.I. Dispensing; established many years; returns last year £2,456; full investigation invited; rent £30; offer wanted.

10.—MIDLANDS.—Well-established Business; returns £600 at fair prices; scope for development; double-fronted shop; rent £36, which includes residence; price £250.

11.—LEEDS.—Retail and Dispensing Business, with N.H.I.; established upwards of 50 years; returns, present rate, between £1,500 and £2,000; price £750.

12.—BUCKS.—Dispensing and Retail Business, all good class; returns exceed £1,500; net profit £520; stock and fixtures estimated at £900; vendor owns property; lease will be granted, or property may be purchased; price £1,200; good personal introduction would be given; vendor retiring.

13.—GLOS.—For immediate disposal, good-class Family Retail and Dispensing Business, with Photographic branch; the concern has been established upwards of 60 years, and held by vendor 43; now retiring; returns last year £1,764; gross profit £541; roomy house; price about £1,000, or valuation terms would be considered.

14.—HANTS.—For immediate disposal, through ill-health, old-established Business; no serious opposition; returns about £900; small residence; rent £35; lease if wished; terms, valuation of stock and fixtures.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasize the necessity of a Periodical Statement of Account, by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties, and will make Special Terms for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.

BUSINESSES FOR DISPOSAL.

8s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

LONDON, N.E.—Shop, d.f.; lock-up Chemists; completely fitted; ready for immediate opening; established over 20 years; exceptional opportunity to obtain good business cheap; rent £45 per annum, inclusive of rates and taxes. Turner, 160 Stoke Newington Road, N.

WEST RIDING.—Established 30 years, a good sound ready-money concern; no credit wanted or given; last year's takings £2,700 under Manager, owner retiring owing to ill-health; N.H.I., and large sale for own Proprietaries; good house, side entrance; lease given. Apply 202/28, Office of this Paper.

A GOOD old-established Dispensing and Family Business for disposal, with N.H.I.; good position near railway station. Bright, Bath.

DRUG Store for Sale; Birmingham suburb; genuine concern, doing progressive trade; excellent opportunity for qualified or unqualified; good reason for selling; goodwill, etc., moderate. Apply 203/31, Office of this Paper.

DRUGGIST'S Sundries and Toilet Articles Business; good position; main road; opened last February; very profitable; good house for letting; bathroom; could do well if drugs were added; price, stock and fixtures, £250; called up. B. Snape, 35 St. James Street, Brighton.

FOR immediate Sale, Drug Store and Optical Business in coast town, Lincolnshire; good prospects for qualified or unqualified person; no immediate opposition; moderate stock, etc., at valuation. Write 204/28, Office of this Paper.

FOR reasons of health alone, I regretfully wish to dispose of my Business; genuine concern and shall be pleased to give particulars to any bona-fide personal application, and a good introduction to same. E. Stow Morris, Pharmacist, 16 Rushey Green, Catford, S.E. 6.

GOOD Business for Sale, returning about £1,100 yearly at profits above average; every investigation courted and proofs given; price £700 or near offer. Apply "X. Y. Z." (204/16), Office of this Paper.

FOR Sale, small Pharmacy near Bolton, Lancs; well situated; business chiefly Prescribing; nearest Chemist one mile away; good living accommodation; rent only 8s. 6d. per week clear; takings about £500 per annum; profits £200; great scope for improvement; exceptional bargain; price only £85. Apply 205/25, Office of this Paper.

OLD-ESTABLISHED Business for Sale near London; returns about £1,800; can be largely increased; satisfactory reasons for disposal; a good opportunity for energetic man. Apply "X. Y. Z." (200/36), Office of this Paper.

OLD-ESTABLISHED Retail, Prescribing, and Dispensing; also, Sight-testing Optician's business in North of England. Apply 118/36, Office of this Paper.

WHOLESALE MANUFACTURING CHEMIST.—Exceptionally good Business for disposal; has four Agents selling direct, also large Wholesale buyers of advertiser's specialty; big demand all over Britain; excellent profits; sales to end of this year will easily be £5,000; could be doubled by man with some capital; owner had hopes of a huge business, but is now called up; trade marks, debts due to firm (£900), will be included; price £4,000 cash, and 10 per cent. of net profits for five years. "Enterprise" (122/51), Office of this Paper.

BUSINESSES WANTED.

A REASONABLY small Business wanted; comfortable house attached, with garden; seaside resort. Apply "Quantock" (202/8), Office of this Paper.

BUSINESS wanted; small business with good N.H.I.; central position; Lancashire town. Particulars to 201/32, Office of this Paper.

QUALIFIED Manager, Grade 3, 19 years' experience, would buy suitable business. Apply 204/33, Office of this Paper.

WANTED (immediately), very small Country Business. It does not matter how small or neglected, must have good garden and comfortable house attached; South preferred, but not essential; will owners or agents please send full particulars, in confidence, to James, 11 Clarence Square, Brighton.

BERDOE & FISH

VALUERS & TRANSFER AGENTS

35 Jewry Street, Fenchurch Street, E.C.3.

Telephone: 1809 CENTRAL.

NO CHARGE TO PURCHASERS.

1.—SOUTH MIDLANDS (Death Vacancy).—Unopposed, good-class country Retail; pleasantly situated; returns £1,350; net profit £367 clear; low rent; good house and garden; nearest opposition 7 miles; thoroughly well stocked; price £900

2.—LANCS.—Sound Cash Retail, within three miles of Bury; present returns about £1,000; no panel; wine licence; very low rent; same hands many years; population 7,000; good chance for smart man; price £400.

3.—NORFOLK.—Unopposed mixed village Retail; returns about £1,150; run as a Drug Store; large house; rent only £20; fully stocked; price £300; illness sole cause of sale; suit unqualified or qualified.

4.—LONDON SUBURB, N.E.—Sound progressive cash Drug Stores in fine main road position; returns nearly £40 a week; no panel; excellent profits; convenient house and premises; well stocked; owner called up; price for quick sale £800; qualified man would soon increase; takings to £2,500.

5.—LONDON, N.—Good-class suburban Retail and Dispensing Business; returning £1,234 last year; good profits; fine corner shop, well fitted and stocked; good house and garden; owner retiring; price only £450.

6.—LONDON (Essex Suburb).—Very profitable cash Retail and Prescribing, with own specialties; returns £15 to £16 weekly, increasing; net profit over £300; low rent; fully stocked; price £475; part can remain; trial allowed.

7.—WEST LONDON.—Sound middle-class cash Retail; returns £26 weekly, plus N.H.L.; good profits; no immediate opposition; low rent; good house; price £350; half could remain if desired.

8.—SOUTH LONDON (Close to City).—Brisk Cash Business for disposal; returns nearly £40 a week; good profits; splendid corner position in busy main road; fully stocked; good modern premises; price £1,000; could arrange entry with £600 cash.

STOCKTAKINGS.

We are now booking dates for August, and appointments should be made early to avoid dates clashing. Terms sent on application. 45 years' practical experience.

SALES BY AUCTION.

BY ORDER OF THE PUBLIC TRUSTEE AS ADMINISTRATOR OF THE LATE COL. CLIFFORD PROBYN.

MESSRS. H. E. FOSTER & CRANFIELD will Sell by Auction at the Mart, Tokenhouse Yard, E.C., on THURSDAY, 25th JULY, 1918, at 2 o'clock, in one lot, 49,998 5 per cent. Cumulative Preference Shares and 50,000 Ordinary Shares, all of £1 each, fully paid, being

THE WHOLE OF THE ISSUED CAPITAL

of the well-known firm of

HOOPER, STRUVE & COMPANY, LTD.,

Chemists and Mineral Water Manufacturers, etc., London and Brighton, Holders of the Royal Warrant.

Particulars of Messrs. Paines, Blyth & Huxtable, Solicitors, 14 St. Helen's Place, London, E.C. 3, and of Messrs. H. E. Foster & Cranfield, Auctioneers and Surveyors, 6 Poultry, London, E.C. 2.

SALE ROOMS, 62a ALDERSGATE STREET, LONDON, E.C. 1.

THE VALUABLE STOCK

of a

CHEMIST AND DRUGGISTS' SUNDRIESMAN AND SURGICAL INSTRUMENT MAKER,

including

250 GROSS TOILET POWDERS IN TINS,

Comprising Tooth, Violet and Shaving Powders, Bath Salts, Fullers' Earth, etc.

PACKED GOODS, comprising Liquorice Powder, Insect, Foot and Moth Powders, Lime Creams, Brilliantine, Bay Rum, Toilet Paraffin, Soap, etc., 1 cwt. Mag. Calcis Levis, 1½ cwt. Mag. Carb. Pond., 1 cwt. Alum, 1 cwt. Orris Root, 2 cwt. Soda Phos., 2 cwt. Soda Sulph., 500 gross Tin Boxes, 300 Shop Rounds and Contents, handsome set of Blue Dome Ointment Jars, Toilet Soaps, Patent and Proprietary Goods, Personal Weighing Machine, and other Utensils.

600 GROSS HYPODERMIC NEEDLES.

Forceps, Air Cushions, Syringes, Douches, Powder Puffs, Thermometers, 5,000 yards Cyanide Gauze, 1,000 packets Eps. Rich's Bandages.

30 dozen Heavy Green Glass Solution Bowls, Rubber Gloves, Sponge Jars, 40 dozen Surgeons' Gloves, 500 Trusses, and a large quantity of Medical Sundries, Chemists' and Druggists' Fancy Goods, etc.

Plate-glass Show Cases, Shop Fittings, and Office Furniture, which will be sold by Auction by

MR. FRANK G. BOWEN, at his Sale Rooms as above, on THURSDAY, JULY 25th, 1918, at Twelve o'clock.

On view day prior and morning of Sale. Catalogues may be had of the Auctioneer, 62a Aldersgate Street and Hare Court, London, E.C. 1.

REMOVED FOR CONVENIENCE OF SALE. SALVAGE AND LOST PROPERTY RECOVERED FROM OCEAN-GOING STEAMERS.

1 and 2 TOTTENHAM SQUARE, TOTTENHAM ROAD, KINGS-LAND, N.E. (Near Dalston Junction).

MR. WILLIAM F. LAING will Sell by Auction upon the Premises as above, on TUESDAY and WEDNESDAY, JULY 23rd and 24th, 1918, at Eleven o'clock precisely, STOCK comprising 5 orates China and two cases Glass Tumblers, 1 ton Leather, Leather Bags, Trunks, Kit Bags, 40 cases Drugs, 4 tons Soap, 1 ton Paint and Dyes, 500 dozen Day and Martin's Dolly Blue, 3,000 dozen Boot Polish, 12,000 Boot Blacking Brushes, 1 ton Brimstone Powder, 30 cwt. Borax, 30 cwt. Grease, 100 gallons Oil, Varnish, and Resin, 4 tons Paper and Toilet Paper, 6,000 bottles Stephen's Ink, 30 cwt. Wax and Sealing Wax, 10 tons Canary Seed, Cloves, Aniseed, and Peppercorns, 50 bales Corks, and a multiplicity of effects.

May be viewed day prior and morning of sale, and catalogues obtained upon the premises and at the Auctioneer's Offices, 143 Whitechapel Road, London, E. 1, and Graham Road, Mitcham, Surrey. Telephone, 3114 Central.

FOR SALE.

ABOUT 50 strong Empty Cases for sale, various sizes, between 39 x 20 x 2½ in. and 24 x 17 x 15 in. Apply 200/34, Office of this Paper.

1 OZ. Atropin Sulph., 2 oz. Cocain, 3 lb. Salicin, ¼ lb. Salicin in 5-grain tablets, 1 lb. Trional in 5-grain tablets, ¼ lb. Guaiacol Carbonate in bulk, ¼ lb. in 5-grain tablets, 1 lb. Quin. Salicyl, ¼ lb. Butyl Chloral Hyd., 1 lb. Acid Benzoic, 6 oz. Theobrom Sod. Sal., 12 grains Hyoscin Hydrobrom, 3 oz. Barbitonum, 3 oz. Sulphonal; all in good condition, mostly pre-war stock. Also 100 grains Apomorph Hyd. (discoloured). Offers to Secretary, General Dispensary, Birmingham.

AGENCIES.

A LEADING firm of Agents in Ireland are open to accept additional Agencies, owing to increase of outdoor staff; excellent connection; good results guaranteed. Apply 204/22, Office of this Paper.

AGENTS required (commission basis) in London, Glasgow, Liverpool, and Manchester, to dispose of 30 tons Cotton Wool in 1 lb. rolls (interleaved) at a keen cut price; no difficulty in disposing, as 40 tons have already been sold locally since January. Apply "Aspirin" (202/9), Office of this Paper.

THE ANGLO-FRENCH DRUG CO., LTD., desire to inform the trade that they have opened a Branch in Paris with large Stock Rooms. They are therefore now in the position to offer their unique experience in introducing British goods and Specialties into France, and would be pleased to receive proposals as to sole Agencies. The Company would also act as buyers in France for British and Colonial firms on a small commission basis. Proposals, etc., which will be treated confidentially, to be sent to the Head Office, Gamage Buildings, Holborn, London, E.C. 1.

SITUATIONS OPEN.

RETAIL.

BLACKPOOL.—Smart up-to-date unqualified Assistant in a quick light cash business for Counter; ineligible and temperate; photo if possible; state commencing salary, which is progressive; permanency; hours 8.30 to 8, Saturday 9, half-holiday. Galloway, 100 Church Street.

BRIGHTON.—Lady Dispenser required for good-class Family trade, and able to assist at Counter; must be able to do good-class work; not Hospital or Doctors. Full particulars and salary required, experience, etc., to Simpson, 135 Queen's Road, Brighton.

CARDIFF.—Duck & Son, Chemists, St. John's Square, have vacancies for two Assistants (Lady or Gentleman). Apply stating usual particulars and salary required (outdoors).

CASTLEFORD.—Wanted, unqualified Assistant; ineligible or discharged; outdoors; must be capable and have good references. State salary and full particulars to T. C. Binks, Chemist, Carlton Street, Castleford.

CLACTON-ON-SEA.—Qualified Manager wanted (ineligible for Army) for Dispensing, Retail, and Photographic business. Apply, stating usual particulars, to Mann, Chemist, Clacton-on-Sea.

DARLINGTON.—Experienced lady Assistant required; qualified or unqualified; good salary paid. Apply, stating age, experience, and salary required, to Waters, Chemists, Darlington.

EASTBOURNE.—Wanted, lady or gentleman Junior Assistant (outdoors) for high-class Dispensing business. State salary, with usual particulars, enclosing carte, to H. R. Browne, Pharmaceutical Chemist, Eastbourne.

GLOUCESTER.—Assistant required (male or female); outdoors; good-class Dispensing and Light Retail. State full particulars, with salary, to Ward & Woodman, Gloucester.

LEAMINGTON SPA.—Lady Assistant, experienced, to manage Branch; need not be qualified; no Dispensing; very light trade; reasonable hours. State salary required for first six months, afterwards weekly salary and percentage of profits can be arranged, give usual particulars, state when at liberty, W. L. Nundy, Chemist, Leamington Spa.

LEEDS.—Locum wanted, capable Dispenser, for four weeks; July, August. Rothstein, Pharmaceutical Chemist, 101 North Street, Leeds.

LONDON, CITY (EAST).—Wanted, an experienced Assistant; good references, and free from military service; state salary required. Apply 185/33, Office of this Paper.

LONDON HOSPITAL, WHITECHAPEL ROAD, E.—Dispenser wanted; lady or gentleman (if ineligible for military service); Minor qualification essential; hours 10 a.m. till 6 p.m., with occasional late duty; commencing salary £150 a year. Apply, personally if possible, before 11 a.m. to the Pharmacist.

LONDON.—Lady Assistant required for Dispensing and Counter; outdoors; comfortable berth. Apply, stating experience, age, height, and salary required, to Dow Brothers, 44 Seven Sisters Road, Holloway, N. 7.

LONDON, N.E.—Lady or ineligible Gentleman Assistant for Dispensing and Counter; short hours. State age, experience, and salary required (outdoors), "B. T." (203/22), Office of this Paper.

LONDON, N.W.—Assistant wanted; married; furnished house provided; good wages. Davidson, Pharmaceutical Chemist, 342 High Road, Brondesbury, N.W. 6.

LONDON, N.W.—An Assistant (lady or gentleman) in a Family Retail and Dispensing business; two kept; or one accustomed to Counter or Stockkeeping not objected. Full particulars in first letter, or personal interview, Alban Atkin, M.P.S., 243 West End Lane, Hampstead, N.W. 6.

LONDON, S.E.—Wanted, an Assistant (lady or gentleman); good Dispenser; outdoors. Apply, stating age, experience, salary required, and when disengaged, to J. W. Rumsey & Son, 535 Lordship Lane, S.E.

LONDON, S.W.—Manager, qualified or unqualified Locum, for week or fortnight after August 10th; middle-class Retail and small number N.I. State particulars of references, salary, and when at liberty, 202/6, Office of this Paper.

LONDON, S.W. 3.—Two qualified Chemists and two Junior Assistants required, ladies or gentlemen. Write, giving full particulars, or by appointment, W. Bennison, Pharmaceutical Chemist, 8 Cale Street, 133 King's Road, Chelsea.

LONDON, W.—Lady Assistant wanted for Dispensing and Counter duties; must be a good Dispenser and have had previous business experience; hours 9 to 6, Saturdays 1 o'clock. Apply, with particulars of experience and salary required, to Hospital and General Contracts Co., Ltd., 19-35 Mortimer Street, W.

MANCHESTER.—Wanted, a thoroughly reliable Assistant, either ineligible or discharged; hours could be arranged for attendance at classes if desired. Also a lady Dispenser, having had previous Counter experience preferred. Apply, giving full particulars as to experience, age, salary required, and references, to 198/31, Office of this Paper.

MANCHESTER.—Wanted, an elderly qualified man; permanency; good wages; fair amount of N.H.I.; part-time if desired. Apply 204/27, Office of this Paper.

MANCHESTER.—Locum required for two months, to commence about July 18th; Apprentice and Assistant kept. S. Matz, 341 Cheetham Hill Road, Manchester.

NEAR MANCHESTER.—Wanted, qualified Assistant; ineligible preferred. State age, experience, and salary required, 201/701, Office of this Paper.

NEAR MANCHESTER.—Lady Assistant required for Retail and Dispensing business; previous Counter experience absolutely necessary. Address, stating age, experience, salary, etc., to 201/700, Office of this Paper.

NEAR MANCHESTER.—Wanted, qualified Assistant; either sex; Counter experience necessary. State age, experience, and salary required, 201/7, Office of this Paper.

PLYMOUTH DISTRICT.—Unqualified Assistant wanted; reliable Dispenser and Counterman; very convenient house provided off the premises; no Sunday duty; permanency. Full particulars to Stephens & Graham, Ltd., Plympton, Devon.

SIDMOUTH (South Coast, Devon).—Reliable Assistant required for high-class Dispensing business; outdoors; comfortable berth; short hours; liberal salary; railway fare paid. Apply, giving all particulars, to Hinton Lake & Son, High-class Chemists.

SOUTH OF ENGLAND.—Assistant required (male or female); free removal; permanency with good salary. Timothy White Co., Ltd., Chemists, Portsmouth.

TEIGNMOUTH.—Assistant (ineligible or lady) wanted for good-class Dispensing; no N.H.I.; easy hours. Apply, with full particulars and salary required, to Dring, Chemist, Teignmouth.

BATTERSEA POLYTECHNIC, LONDON, S.W. 11.

THE Governing Body invite applications for the post of Assistant Lecturer and Demonstrator for Practical Pharmacy, Materia Medica, etc., on three half-days per week for the Session 1918-19 (September 24th to July). Lady eligible. Salary £70.

For full particulars apply to the Secretary.

TORQUAY.—Qualified Assistant (ineligible) or lady for Dispensing and Front Counter. Apply E. Quant, Torbay Pharmacy, Torquay.

WEST END.—Wanted, a thoroughly qualified Dispenser for a first-class business in the West End; liberal salary and excellent prospects for a really good man. Apply "I. B. C." (201/38), Office of this Paper.

WEST OF ENGLAND.—Wanted, Assistant for good-class Chemist's business; short hours, no Sunday work. Apply 123/41, Office of this Paper.

WOLVERHAMPTON.—Outdoors Assistant, lady or gentleman, qualified preferred (if gentleman must be ineligible), for good-class Dispensing business in residential district; easy hours; no N.H.I. Insurance. Apply, with full particulars, references, and salary required, E. E. Hall, Newbridge Pharmacy, Wolverhampton.

WORTHING.—Lady Assistant wanted, with Dispensing experience; outdoors; good-class business. Send particulars, with reference, to W. Aston, Pharmaceutical Chemist, Worthing.

A TEMPORARY Assistant (lady or gentleman) for August-September; outdoors; experienced in Dispensing. Wood, Pharmaceutical Chemist, Windsor.

A energetic gentleman to assist in the management and control staff of a busy branch where there is Insurance Dispensing; easy hours, no Sunday or night duty; applicants need not be qualified, but must be over military age. Apply 202/13, Office of this Paper.

A SSISTANT wanted (immediately) in good-class business; one with some general experience; hours very easy. State salary, references, and photo (promptly returned), Nicholls, Pharmacist, Chelmsford.

A SSISTANT, outdoor (Lady or Gentleman); knowledge of Dispensing and Retail; no N.H.I. work. Apply, G. W. G. Robinson, M.P.S., 307 Raiton Road, Herne Hill, S.E. 24.

A SSISTANT; qualified; lady or gentleman; indoors or outdoors; would suit elderly or one in delicate health, as work is light; beautiful country; easy hours, no Sunday duty, half-day, etc. Apply, stating full particulars, "Salol" (204/12), Office of this Paper.

A SSISTANT required (at once) for the Retail Counter. Apply W. H. J. Allen & Hanburys, Ltd., 37 Lombard Street, E.C. 3.

A SSISTANT; either part or full time; outdoors; any reasonable hours arranged. Also a Saturday Helper; principally evening trade; no ladies. R. Pratt, 94 Canterbury Road, West Kilburn, near Queen's Park Tube, Bakerloo.

C APABLE Assistant required; lady or gentleman; Dispensing and Photographic experience essential; outdoors; moderate hours; progressive berth to willing and conscientious worker. State salary required, Latimer Davies, Ltd., Pharmacists, High Street, Newport.

C APABLE Dispenser, Bookkeeper, and Surgery Attendant required (shortly) by Doctors in South London; comfortable post for suitable man or woman; held by late incumbent 14 years. Apply, by letters only in first instance, stating age, experience, and salary expected (send no photographs nor testimonials), 135 Hill Street, Peckham, S.E. 15.

D ISPENSER (lady), experienced, also male Dispenser, discharged from Army or ineligible. Apply A. Cooper, Cooper Son & Co., Ltd., 80 Gloucester Road, South Kensington.

D OCTOR requires Dispenser; morning and evening; East London. Write 203/35, Office of this Paper.

F IRST-CLASS Assistant, lady or gentleman, for Dispensing business near London, where three are kept; must be thoroughly capable and experienced; good salary; comfortable home or unfurnished rooms provided. Applicants kindly state qualifications (if any), age, experience, and references to "Aconite" (203/14), Office of this Paper.

J UNIOR wanted; good Dispenser; ineligible or discharged soldier or lady Assistant. State salary and experience to C. J. Allan, Chemist, Redcar, Yorks.

L ADY (qualified) required; a thorough business person for a busy good working-class trade; N.H.I. Dispensing, Counter, and general trade; Apprentice allowed; good comfortable, permanent berth and good salary. Full particulars in confidence, "North Staff" (189/21), Office of this Paper.

L ADY Dispenser, Hall qualification, wanted (at once) for good-class and N.H.I. Dispensing. Apply, with full particulars, to Ekins & Fisher, Market Place, St. Albans.

L ADY Assistant and lady Apprentice wanted in Retail Dispensing, Photographic business; others kept; outdoors. Apply, with particulars, experience, salary, etc., to Williams, Medical Hall, Holyhead.

L ADY Dispenser wanted; N.H.I. qualification; good wages. Jessop, Chemist, Chasetown, near Walsall.

L ADY Assistant required (at once) for seaside business; good-class Dispensing and Counter knowledge essential; live out. State salary, height, experience, references, to W. T. Spriggs, Pharmaceutical Chemist, Wallasey, Cheshire.

LADY Assistant; competent Counter hand and Dispenser; permanency; progressive salary; Midlands. "L. A. M." (201/113), Office of this Paper.

LADY Assistant; Yorks, West Riding; comfortable permanency for capable young lady who has had some experience in Dispensing and Counter work. "L. A. Y." (201/110), Office of this Paper.

LADY Assistant; London; experienced Dispenser and capable at the Counter; permanent position. State age, salary required, and when at liberty. "L. A. L." (201/112), Office of this Paper.

LADY Clerk (Junior) required to keep sales ledger and write invoices; preference given to one with knowledge of type-writing (Remington). Quibell, The Station Pharmacy, Golders Green, N.W. 4.

LADY Assistant required, principally for Counter, in high-class Family Retail and Dispensing business; outdoors. Apply, stating age, experience, and salary required, also enclosing photograph if possible, S. Browning Moss, West Byfleet, Surrey.

LADY Assistant for Dispensing and Stock and Counter; thoroughly reliable and experienced. Please state references, experience, and salary required. Also a lady Improver. Apply, with full particulars, to Gibbs, Chemist, Berkhamsted. Phone 69.

LADY Assistant for Dispensing; evenings 5-8 p.m., or afternoon and evenings, 3-8 p.m.; one other lady Assistant kept. Apply, with usual particulars, age, etc., and salary required, to E. L. Slade, Chemist, 3 Station Parade, Kew Gardens.

LOCUM IN MIDLANDS FOR A FEW MONTHS.—Wanted (at once), a competent, gentlemanly, and reliable man to assist elderly principal in brisk provincial business during Senior Assistant's illness. For a really capable, energetic, and trustworthy man desiring a permanency, prospects of Managership and interest in business. Apply, giving recent references and usual particulars, enclosing photo if convenient, 122/62, Office of this Paper.

LOCUM (qualified) wanted at once for about a month. State references and wages required, Hughes, Chemist, Ramsgate.

LOCUM wanted for one week from July 22nd. Apply Mr. Jee, 60 Watney Street.

LOCUM required for two weeks; August or September, preferably August; outdoors; reasonable hours, no Sunday duty. Applicants are requested to state, in first instance, recent references and salary required, Walter Reeson, 80 High Street, Erith, Kent.

LOCUM, qualified Chemist, Optician, to take charge for two weeks from July 29th. State terms, particulars of experience, and references, W. Edes Everett, Ltd., St. Botolph's Pharmacy, Colchester.

LOCUM, or part-time Locum, required for last three weeks August. The Pharmacist, Chest Hospital, City Road.

LOCUM (qualified) wanted immediately, first two or three weeks, or permanency; £4; outdoors. Apply 204/600, Office of this Paper.

LOCUM, Minor qualification, required for three weeks, in August or September, for the French Hospital, Shaftesbury Avenue, W.C.; French not essential; hours 10.5 p.m. Apply to "The Pharmacist" (204/1), Office of this Paper.

LOCUM.—London engagement for 8 to 10 weeks offered to a reliable qualified man at £6 weekly. Apply 205/20, Office of this Paper.

LOCUM (qualified preferred) for about four weeks; City business; short hours, no Sunday duty, close 1 p.m. Saturdays. Apply, stating age, salary, etc., Hy. Lamplough, Ltd., 113 Holborn, E.C. 1.

MANAGER, outdoors (lady or gentleman), required for Port Dinorwic; state age, experience, salary, and all particulars by first letter. Apply W. G. Williams, Nevin, Carnarvonshire.

MANAGER or Managing Assistant (immediately), discharged or ineligible, for good-class Retail Dispensing and Photographic; married; to live over premises; must have good references. T. E. Savage, 30 Broadway, Crouch End, N. 8.

MANAGER, qualified, wanted at once for a good-class country branch (Witham, Essex); easy hours; good house attached. Apply, giving age, medical category, experience, references, and wages required to T. Bellamy, Pharmaceutical Chemist, Chelmsford.

MESSRS. TIMOTHY WHITE CO., LTD., Chemists, Portsmouth, require a capable Pharmacist (male or female); easy hours; good and progressive salary, with excellent prospects; free removal.

MINOR qualification; chiefly as Dispenser, but capable of taking charge; good salary to the right man or woman; short hours, no Sunday duty; near London. Apply 204/6, Office of this Paper.

OPTICAL, Refractionist, discharged from Army, required for high-class Retail British business in the East; good tropical climate; excellent opening. Apply, stating diploma and experience, to 195/16, Office of this Paper.

POINGDESTRE & TRUMAN require a qualified Assistant for a City Branch; hours 9 a.m. to 6 p.m. Also a Temporary Assistant for about two months. Apply to 71 Old Kent Road, S.E. 1.

QUALIFIED Dispenser required in September for Mildmay Mission Hospital, Austin Street, Bethnal Green, E. 2. Fifty beds and out-patients' department. Facilities for teaching. Apply Matron.

QUALIFIED Chemist to manage a busy Branch in the centre of a populous town near Birmingham; easy hours, no Sunday or night duty; commission on profits. Applicants should send full particulars of past experience, stating age and salary required, 202/130, Office of this Paper.

QUALIFIED Assistant Manager, with or without view to partnership; good-class Retail and Dispensing; short hours; pleasant North Country. Please state salary required, references, experience, etc., 200/3, Office of this Paper.

QUALIFIED young man, single and rejected or discharged, required immediately; permanency, with good prospects of advancement. Please state age, salary required, and when at liberty. "H. L." (201/11), Office of this Paper.

QUALIFIED Manager, over military age or rejected, required for first-class business in the provinces; splendid opportunity for a capable and energetic man. "H. L." (201/111), Office of this Paper.

QUALIFIED Manager or Assistant for Retail and Dispensing business; N.H.I.; state age, salary, references; etc. Apply 87 Clarendon Road, High Street, C-on-M., Manchester, S.E.

QUALIFIED Manager wanted for good-class business (outdoors); must be active and thoroughly reliable. Apply, with usual particulars, to Mrs. James Lloyd, 125 St. John's Hill, Clapham Junction, S.W.

REQUIRED (shortly), qualified woman to manage small Retail business for some years managed by a woman Pharmacist; some N.H.I.; working-class London district; state salary (non-resident). Apply for further particulars to Box 202/12, Office of this Paper.

REQUIRED, Dispenser, either sex, in large West-End house; hours of work 8.45 to 6, 1 o'clock Saturdays, no Sunday duty. Apply, stating full particulars of past experience and salary required, to Manager of Drug Department, Army and Navy Stores, 105 Victoria Street, S.W. 1.

REQUIRED, unqualified Assistant for Dispensing, Counter, and Stock; permanency if desired; outdoors. Apply, stating experience and salary, to Thornton, 100 Landor Road, S.W. 9.

REQUIRED, lady Assistant for Counter, with good knowledge of Drugs and Toilet articles; good salary and commission on sales. Apply personally, or by letter, to Manager of Drug Department, Army and Navy Stores, 105 Victoria Street, S.W. 1.

REQUIRED for South Coast, high-class Family trade; unqualified Assistant; must be smart Counterman and good address; 60s. per week; free house and commission. Full particulars, when disengaged, medical classification, age, etc., to Simpson, 135 Queen's Road, Brighton.

REYNOLDS & BRANSON, LTD., Leeds, require Locum for Dispensing and Retail Pharmacy for three weeks commencing July 29th. Apply as above, giving full details as to experience and salary required.

SAVORY & MOORE require a Clerk in their Retail Office; a knowledge of bookkeeping and the Drug trade essential. Apply, with full particulars, to the Manager, 143 New Bond Street, W. 1.

SURGICAL INSTRUMENT BUSINESS.—Assistant for Shop Counter; state age, other duties accustomed to, and wages expected. Reply "Surgical," Lee & Nightingale, Liverpool.

TEMPORARY Assistant required for six weeks; qualification not necessary; good-class business; outdoors. Please apply to Phillips, Chemist, Wolverhampton.

UNQUALIFIED Assistant wanted (at once) for Counter and Dispensing; Hall certificate preferred, but not essential. State full particulars in first application, with references, Shaw, Pharmacist, 93 Dewsbury Road, Leeds.

UNQUALIFIED Assistant, accustomed to good-class Retail and Dispensing; Grade 3; ineligible or discharged; other Assistants kept; must have good references as to trustworthiness and capability. Full particulars, salary required, references, etc., to J. R. Caye, Ltd., 52 Nevill Street, Southport.

WANTED, in a City Dispensing business, an unqualified lady as Junior Assistant; short hours, no Sunday duty. Apply, stating salary required, to Staff Superintendent, C.S.S.A., Ltd., 136 Queen Victoria Street, E.C. 4.

WANTED, a qualified lady as Dispenser. Apply, stating age, salary required (photo if possible), and references, to Messrs. Wyllys, Wyllys & Lee, Surgeons, Great Yarmouth.

WANTED, elderly qualified man, age no object, for light duties only; a fine opening for an elderly man; easy hours arranged to suit. Apply Oliver & Co., Ltd., 487 High Road, Tottenham, near Bruce Grove.

WANTED, lady Assistant; easy hours; healthy locality. State experience, qualification, and salary required (outdoors), to W. G. Bodley, The Pharmacy, Four Oaks, Sutton Coldfield.

WANTED, well-educated qualified Senior, accustomed to a high-class Dispensing business; outdoors; three kept; hours of business, 8.30 to 7. Apply to Mr. Lewis, Chemist, Ealing, W. 5.

WANTED, qualified Manager (ineligible) or fully-qualified lady for good branch business at Barry. Apply, stating age, experience, and salary required, to W. T. Hicks & Co., 28 Duke Street, Cardiff.

WANTED, Assistant; unqualified; mixed light country Retail; N.H.I.; purely industrial district; outdoors; weekly half-holiday; no Sunday duty. W. H. Jones, Chemists, 9 Oxford Street, Mountain Ash.

WANTED (at once), Sixth Dispenser; salary £130 per annum; Minor qualification essential; ladies eligible. Apply to Acting Pharmacist.

WANTED, Assistant; outdoors. Apply, stating age, experience, and salary required, to L. Cameron, Pharmaceutical Chemist, Seaford, Sussex.

WHOLESALE.

LIVERPOOL.—Man wanted for Tablet-making department; previous experience desirable, but not essential. Apply 120/18, Office of this Paper.

A GENTLEMAN about 35, ineligible, with thorough knowledge of Wholesale Drug trade both in office and warehouse, to fill important post in London Wholesale Druggists; must have had experience in management of warehouse staff; good salary, with prospects for energetic and capable man. Apply, with full particulars, to 124/24, Office of this Paper.

ANALYTICAL Chemist (Soap, Oils, and Fats) required by London firm; progressive position; good opportunities. Reply, stating age, experience, and salary required, "Z. P.", 257, care Deacon's, 7 Leadenhall Street, E.C. 3.

BOTTLE MAKERS WANTED.—Well-known firm are desirous of having two thousand gross half-ounce white flint squares made from own mould; prompt cash settlement. Apply 197/180, Office of this Paper.

COUNTER Assistant for Surgical Department; state wages and experience; ineligible. Philip Harris & Co. (1913), Ltd., 144 Edmund Street, Birmingham.

COUNTER man wanted by London firm; Wholesale Druggists; permanent job for good man. Write Box R.E. 365, c/o Jackson's, 19 Cullum Street, E.C. 3.

EVANS, GADD & CO., LTD., require (at once) a qualified Assistant, male (ineligible) or female, for their Manufacturing Laboratories; good salary and prospects. Apply, with full particulars of experience and references, to H. Wippell Gadd, 100 Fore Street, Exeter.

EXPERIENCED Warehouse Assistant wanted (male or female) by firm of Wholesale Chemists in West Riding of Yorkshire. Apply, giving full particulars, with references and salary required, to 123/30, Office of this Paper.

EXPERIENCED Invoice Clerk (male or female) required; also Under-Warehouseman and Wet-counter-Hand. State wages and experience, 292/40, Office of this Paper.

FACTORY Manager (ineligible) required by well-known Food Manufacturing Company; must be competent to take full charge of all work and labour; experience in connection with packing small packets in large firm most essential; good salary will be paid to the right man. Write, stating age, salary required, and full particulars, of experience, to Z. F. M., care Deacon's, Advertising Offices, Leadenhall Street, E.C. 3.

MANAGER'S Assistant required by a progressive firm of Manufacturing Chemists; applicant must be ineligible for Army, and possess an intimate knowledge of Malt Extract Manufacture and Vacuum Plant; good prospects for man capable of taking charge of works, which are situated in country near London. Write, stating age, stating salary required, and full particulars of experience, to "M. H." (123/6), Office of this Paper.

QUALIFIED Manager required for Birmingham. State fully experience and salary, first letter, 205/28, Office of this Paper.

REPRESENTATIVE, ineligible, with experience in calling on large Stores and Wholesale Druggists, etc., in London, required by large Toilet Soap and Perfumery house; another required for South Coast territory. Reply, stating full particulars and salary, to 113/54, Office of this Paper.

REPRESENTATIVE (ineligible) required by large Toilet and Perfumery house to call upon Chemists throughout Wales. Reply, stating age, experience, and salary required, to 122/45, Office of this Paper.

REQUIRED, a capable Representative; ineligible, for leading Perfumery house; good remuneration; London district. Apply Box 123/6, Office of this Paper.

SHIPPING Clerk; non-eligible; junior preferred; conversant with W.T.D. licence routine and general office work. By letter, giving full particulars, "S.", 122 Great Suffolk Street, S.E. 1.

TRAVELLER required to carry as side line on commission to Sundriesmen and large Retailers well-advertised Toilet Article. Write, stating terms required in first instance, to "Eyddol," c/o Cutting & Underwood, Ltd., 10 Norfolk Street, Strand.

UNDER-WAREHOUSEMAN in London Wholesale Drug house; good wages. Apply, with full particulars, to 119/15, Office of this Paper.

WANTED, part-time Locum Assistant to assist at Counter, Wholesale Drug Company; Assistant would do for each evening and alternate Sunday evening; a fine opening for a Wet or Dry Counter Assistant to learn trade; permanent berth. Apply Oliver & Co., Ltd., 487 High Road, Tottenham.

WANTED, young lady with knowledge of Dispensing Perfumes, to assist in management of Toilet Requisites Works. Apply by letter only to Herbert Johnston, Brabant Court, 8 Philpot Lane, E.C.

WANTED (at once), qualified Assistant; seaside branch; ineligible. Give full particulars of experience, references, salary required, when disengaged, photo if possible, Walker & Harris, Ltd., Chemists, Sun Street, Canterbury.

WANTED, Assistant to make Pharmaceutical preparations, dispatch orders, and keep stock in growing Wholesale business; good opening for energetic and capable man; state fully experience and salary required. Apply by letter, "Druggist," 77 Cannel Street, Manchester.

WET and Dry Floor Assistants wanted (at once). Apply Willows, Francis, Butler & Thompson, 40 Aldersgate Street, E.C.

WET and Dry Floor Assistants required; good wages. Apply, with full particulars, to 119/150, Office of this Paper.

SITUATIONS OPEN.

(Colonial, Indian and Foreign.)

RANGOON.—E. M. de Souza & Co. require (immediately) qualified Assistant; ineligible or discharged; under 30; salary Rs. 450 (rupee equivalent 1s. 6d.) per month; four years' agreement; good prospects; passage paid out and home. Apply E. M. de Souza & Co., 44 Holborn Viaduct, E.C. 1.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 10 words or less beyond, prepaid.

[HOME.]

RETAIL.

A YOUNG lady, nearly 18 (Senior Cambridge Local), desires to become Student Apprentice to good Chemist (indoors). L. R. M., 90 Radstock Road, Reading.

ADVERTISER desires temporary engagement; thoroughly experienced and reliable; good references. Apply 198/14, Office of this Paper.

ADVERTISER, 45, married, Grade III., but fit, best and varied experience, though unqualified, desires good permanency; Prescription, Optical a speciality; ten years' present position; disengaged August 6th; Southern Counties preferred. Please state salary and hours, "Responsible," Ivanhoe, Well Street, Ryde, I.W.

ADVERTISER, desiring change, wishes situation as Manager in September; qualified; all-round experience; Extractor, Prescriber, Dispenser, N.H.I., etc.; live over shop; anywhere north of the Trent; market town or seaside preferred. Apply 122/14, Office of this Paper.

A S Locum; August 9th to 22nd inclusive; qualified; 20 years; Optics, F.S.M.C., Photography; sea-coast town. Tansan, 128 Bingham Road, Harringay, N.

A S Locum; excellent refs.; extensive experience; reasonable terms. Apply 203/11, Office of this Paper.

A S Manager; qualified; middle-aged; married; Grade 3; succession entertained. Apply 202/29, Office of this Paper.

BRANCH Manager; qualified; exempt; married; successful business man; Leeds or rear; £5. "Ferix" (202/4), Office of this Paper.

DISPENSER, 23, requires post with Doctor; country preferred. Apply 203/19, Office of this Paper.

DISPENSER (Hall) seeks post; Doctor; out of London preferred; knowledge of dressings. Apply 204/32, Office of this Paper.

ELDERLY gentleman seeks position with a Retail Chemist or Wholesale; Midlands preferred. Address J. Newton, Windy Arbour, Kenilworth.

EMPLOYER recommends his present Manager; age 47; qualified; suitable for high-class West-End business; excellent Buyer and Salesman; £500 and commission. Apply 203/1, Office of this Paper.

EXPERIENCED Assistant, Dispensing and Counter, 36, tall, desires situation in London; married. Apply 201/31, Office of this Paper.

EXPERIENCED Works Research Chemist requires position with firm engaged on war work. Apply 204/38, Office of this Paper.

GENTLEMAN, 45, qualified, wishes to represent good house; whole or part time. "Pharmacist," 9 Claverton Street, S.W.

GENTLEWOMAN desires position as Dispenser in Midlands or North; Hall qualification; Hospital experience; testimonials. "A. L.", 473 Stretford Road, Old Trafford, Manchester.

GOOD Dispenser and Counterman, 28, married, exempt, 10 years' all-round experience; seeks position with Chemist at Reading or near; highest references. Reply "Dorie" (205/1), Office of this Paper.

LADY, unqualified, five years' experience, seeks situation; Dispensing and Retail; salary £150; reasonable hours. "W. B." (201/15), Office of this Paper.

LADY; 26; experienced Counter Assistant or Stock Room; excellent references; London or seaside. Apply 200/13, Office of this Paper.

LADY, 38, married, Counter, Stock, Window-dresser, or would take post in Wholesale. Apply 204/7, Office of this Paper.

LADY Dispenser, Hall certificate, requires part-time post; South of England; Sussex preferred. Apply Allanson, 1 Church Cottages, Pyecombe, Sussex.

LADY Dispenser; Hall; testimonials; Doctor. Miss Rady, c/o Mrs. Philp, Barras Cross, Liskeard.

LADY Dispenser (Hall) requires post with Doctor; some experience. Apply 202/25, Office of this Paper.

LOCUM.—Lady Dispenser (Hall) requires post with Doctor or Institution; twelve years' experience; free 1st August. "S." (201/17), Office of this Paper.

LOCUM; educated gentleman; highest Hospital and Medical experience; qualified Dispenser; exceptional references; July, August. Please state period and terms, 202/15, Office of this Paper.

LOCUM or Manager; wide experience; highest references. "Beta" (198/13), Office of this Paper.

LOCUM; qualified; elderly; good references; at liberty July 24th; North or Midlands. Apply 205/26, Office of this Paper.

LOCUM for four weeks during August or September; outdoors; no N.H.I. or Sunday duty. State terms and references to Liversidge, Chemist, Coney Street, York.

LOCUM (qualified); disengaged August; good all-round business experience; best references; seaside or country preferred. J. F., 11 Perrymead Street, Fulham, London, S.W.

LONDON (N.W.) AREA.—Lady, having passed Preliminary exam., desires to start Apprenticeship with Chemist; outdoors. Reply, with full particulars, to 202/33, Office of this Paper.

MANAGER; disengaged; qualified; over military age; successful Prescriber; married; locum entertained; first-class all-round experience. "Chemist," Parkholme, Beaconsfield Road, Clacton.

MANAGER (qualified) seeks position with sole control; has held similar positions in London and provinces; excellent references; varied experience. Apply "Fides" (204/19), Office of this Paper.

MANAGER, qualified, present position four years, is open for engagement; exempt; active; personal interview preferred. Terms and particulars to 203/39, Office of this Paper.

MANAGER, 49, exempt, energetic, experienced, reliable, open to immediate engagement; permanency; increase branch or easy succession entertained; Prescriber, etc.; London; unregistered. Address "Energy" (203/25), Office of this Paper.

MANAGER; qualified; 35; experienced London and provinces; Sussex preferred. Owles, 30 Oxford Gardens, W. 10.

MANAGEMENT of Drug Store; unqualified; steady; ineligible; or accept Locum; London preferred. Chemist, 33 East Street, Andover, Hants.

MANAGER; qualified; 27; Army discharge; abstainer; energetic. Apply "Energetic" (202/18), Office of this Paper.

MANAGER; qualified; 30 years' London experience; energetic; unimpeachable character; Optician; Dentistry if desired. Apply 203/100, Office of this Paper.

MANAGER; qualified; would entertain Locum; excellent all-round experience, active, energetic; disengaged shortly. References, state terms offered, "Exempt" (202/30), Office of this Paper.

MANAGER, 40, exempt, qualified, requires post in Birmingham or district. M.P.S., 14 Beechwood Road, Hornsey, N.

MANAGER, qualified, 40, married, free from Army, capable, competent, and experienced, used to buying and controlling staff, good references, desires comfortable permanency. Chemist, 217 East India Dock Road, London, E. 14.

MANCHESTER or district preferred; Pharmacist, 28, Grade 3, sedentary, conditional exemption, desires permanent post as Branch or Assistant Manager; highest references; disengaged end July. H. L., 110 Great Clowes Street, Broughton, Manchester.

PHARMACISTS that urgently require a competent, qualified, energetic and trustworthy Manager or Locum should please retain the address and wire or write to me, John Williams, 14 Penn Road, Wolverhampton.

QUALIFIED, 39, single, Grade 3, requires engagement. Leas, 3 Levensgrove Terrace, Dumbarton.

QUALIFIED; Grade 3, married, 26, as Manager; view to succession; must be country; excellent references. "Chemicus" (200/37), Office of this Paper.

QUALIFIED Locum; Branch; part-time. Chemist, 26 Telford Road, Westbourne Park, W.

QUALIFIED; 45; two or three days weekly. "Pharmacist," 9 Claverton Street, S.W.

QUALIFIED Manager requires berth; seaside or country; ineligible, and with good all-round experience in the business; good references; reliable and steady. Give full particulars, "Data" (203/28), Office of this Paper.

QUALIFIED Locum; disengaged August 12th; exempt; age 30; height 5 ft. 9 in.; high-class Dispensing experience. Apply 202/26, Office of this Paper.

UNQUALIFIED, 29, ineligible, requires berth; Manchester or Liverpool district for preference. Apply 204/35, Office of this Paper.

UNQUALIFIED; 24; Grade III; good-class experience; last engagement four years. State salary, hours, etc., to "Provincial" (203/12), Office of this Paper.

WANTED, situation as Dispenser; Hall student. M. N., Ingram-House, Stockwell, Clapham.

WANTED, post as Dispenser; with Chemist preferred, or Doctor's or Hospital work; Farnham or Aldershot district. Miss Duchesne, 61 Carlton Hill, N.W. 8.

YOUNG lady requires post (indoors) immediately to Chemist; little knowledge; wishes to pass Hall exam.; permanency; good credentials; no objection to Counter work; provincial preferred. Apply 204/30, Office of this Paper.

YOUNG man (permanently discharged), with Wholesale and Retail experience, desires position as Traveller; low salary and commission; London or provinces. Apply 205/29, Office of this Paper.

WHOLESALE.

DUBLIN.—Traveller disengaged; birth certificate June 1867; sound experience Chemicals, Soaps, Packed Goods, etc.; first-class connection Wholesale and Retail; exceptional references. Apply 194/18, Office of this Paper.

GENTLEMAN, young, totally rejected, desires berth as Traveller; Toilet Specialities or Chemist's goods; Birmingham district. "Chemicus," 108 Ladypool Road, Birmingham.

GENTLEMAN, 37, ineligible, seeks situation with first-class firm as Representative or responsible position. Reply 203/33, Office of this Paper.

TWO Representatives with excellent connection, Wholesale and Retail Drug trade in Ireland, desires change. Apply 204/220, Office of this Paper.

MISCELLANEOUS.

SECOND-HAND CHEMISTS' FITTINGS.—We have an exception- ally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 262 Old Street, London, E.C.

SHOWCASES AND SHOP FITTINGS.—Several fine Silent Sales- man Showcases and Counters; quantity of useful Shop Fittings; low prices. Write inquiries, Philip Josephs & Sons, Ltd., 93 Old Street, London, E.C. 1.

140 LB. Saccharin Tablets, $\frac{1}{2}$ gr., 330 in 1, over 7,000 to lb., £7 10s. per lb.; 2 lbs. £7 9s. 6d. per lb.; cash with order; registered post same day. A. Walton, 40 Washington Street, Bradford.

100,000 Saccharine Tablets; prompt delivery, Monsanto brand; $\frac{1}{2}$ in 1; 330 full strength; 5 to 10,000 at 22s.; 10 to 50,000 at 21s. 6d.; 50 to 100,000 at 21s.; posted by return for cash on *pro forma*. Apply 196/24, Office of this Paper.

EXCHANGE COLUMN.

One halfpenny per word with name and address. One penny per word if we register the address and attach a number. No advertisement inserted for less than 6d.

FOR DISPOSAL.

DENTAL.

DENTAL Instruments; fifteen Forceps; new condition; fourteen Excavators and Sealers; £3 or near offer; approval against post-dated cheque. Apply 204/14, Office of this Paper.

OPTICAL AND PHOTOGRAPHIC.

13 DOZ. Spectacles and Eyeglasses and hanging Show Case; £5 10s. Schofield, 17 Scotland Road, Liverpool.

MISCELLANEOUS.

GEM Pure Water Still, 40s. Marsh, 41 Newcomen Street, S.E. 1.

RONEO Duplicator, as new, £5. Marsh, 41 Newcomen Street, S.E. 1.

TWO small Vulcanite Lower Show Pieces. R. Lamb, 123 West End Lane, London.

HAMMOND Typewriter; visible; as new; £10. Marsh, 41 Newcomen Street, S.E. 1.

COPPER Stock Pot, 10 gall., with valve outlet, £6. Marsh, 41 Newcomen Street, S.E.-1.
 72 Japanese Air Cushions, $10\frac{1}{2}'' \times 15''$, at 11s. 6d. per doz. Vincent, 460 Holloway Road, London.
 ROBERTS' Filling Machine, nearly new; also 10 gall. Copper Jacketed Pan, tripod stand. Jackson's, Pownall Square, Liverpool.
 FOUR 8-gal. Acid-proof Jugs, two 4-gal., two 1-gal.; 8-gal. Filter, 24×30 Chilling Pan; all Doulton Ware; cheap to clear. H. B., 17 Ashmere Grove, Brixton, S.W. 2.

WANTED.

PILL Makers wanted; well-known firm are desirous of having Pills made from own ingredients; one to two million 5-grain coated Pills per month required; prompt cash settlement. Apply 116/50, Office of this Paper.
 STARCH, lump and powder. Belsher, Chemist, Bloxwich.
 LOZENGE Press (for powder). "M." 59 Dunbar Street, S.E. 27.
 PARKER Prays Rosaline. J. G. Edwards, 35c King Street, Cheapside.
 TABLET Machine in good condition. Particulars to Binks, Finn & Co., Morrison Street, Castleford.
 EUTHYMOL Shaving Cream; old stock; captive cap tubes. Also Toilet Rolls. Amos, Chemist, Weybridge.
 MAIZE Starch Powder; any quantity up to a ton. Price to 204/3, Office of this Paper.
 THIOCOL Tabs. (5 gr.), stamped; Liebig's Wine; Quinine Sulphate. McMullan, Chemist, Larne.
 SQUIRE'S "Companion to Pharmacopoeia." Date and price, Marsh, 41 Newcomen Street, S.E. 1.
 O'BRIEN Till; Little Wonder; $6\frac{1}{2}$ in. wide. Particulars and price. Coutts, Chemist, Broad Street, Aberdeen.
 MANUFACTURING Firm require Montan Wax and Carnauba Wax. Offers to 114/41, Office of this Paper.
 DRUMS (second-hand) required; any quantity; any size. Particulars to 187/22, Office of this Paper.
 CELLULOID Scrap Films; pieces or waste; spot cash for 1-lb. or 10-ton lots. H. B., 17 Ashmere Grove, Brixton, London, S.W.
 WANTED to buy for prompt cash, Glucose Liquid in 1 cwt. lot or more. Offers to Dakin Brothers, Ltd., 82 Middlesex Street, E. 1.
 BOOK of Universal Remedies, or the name of such a book. I am told there is one in two volumes. C. Smith, 6 Regent Street, Nottingham.
 GARDNER'S Patent "Rapid" Sifters and Mixers. Advertisers require three or four, hand or power. Sizes and manufacturing numbers to 123/18, Office of this Paper.
 TOILET Rolls, Cachous, Listerine Gelatine Lozenges, L.L.C. ditto, Dioxogen, Lyon's Tooth Powder, Shop-soiled Sundries, Coal Tar Soap. Röper, Chemist, Dunmow, Essex.

£2 REWARD to anyone who can tell me where I can buy a good Visible Typewriter; reward posted immediately purchase is made. White, 71 St. Giles Street, Northampton.

WANTED, Tincture Press. State capacity, make, and price to 115/45, Office of this Paper.

BIG prices paid for Stokes' or Colton Tablet Machines; Pill Machinery also wanted. Particulars to 78/58, Office of this Paper.

WANTED, Radium Salt, pure or Residues, old Applicators, etc. Apply Harrison Glew, Radium Laboratories, 156 Clapham Road, S.W. 9.
 OPTICAL books, Minor, Major, Chemists' books; send prepaid for valuation, cash offers per return. Gower, Bookseller, 41 Voltaire Road, Clapham, S.W.

WANTED, small round Ointment Boxes in large or small quantities. Send sample, with price, 204/26, Office of this Paper.

JOB line Tins wanted, suitable for Boot Polish, etc. We are also buyers of Tin Plates, printed or plain. Also Cartons for same. "Brytenup" Polish Works, Marsh Lane, Preston.
 SPECTACLE Lenses, Gold-filled Spectacle and Eyeglass Frames, in any quantity. Particulars and prices to Bishop & Vincent, 460 Holloway Road, N. 7.

SACCHARINE TABLETS.— $\frac{1}{4}$ grain 330. The Advertisers are prepared to take and pay cash for quantities from 20 lb. to 3 cwt. per week. Price must not exceed £4 10s. per lb., and Tablets to run, if possible, 8,000 to the lb.
 Replies, giving full particulars, will be promptly dealt with. 191/9, Office of this Paper.

WATSONS' OF SHEFFIELD

Give **TWO-THIRDS** Retail Price for No. 1 Junior Kodaks and No. 2 Folding Brownies and for many other cameras.

Three-quarters Retail Price for **ROLL FILMS** of all kinds.

Out-of-date films bought for experimental purposes.

If you have anything photographic, cameras, apparatus or supplies you cannot sell, send it to us now. It will never be worth so much to you again.

Ask your nearest chemist friend if he was satisfied with the price we paid him. He'll tell you.

All remittances immediately and all goods returned **CARRIAGE PAID** at once, if required.

TESTIMONIALS.

LONGTON. "Many thanks for postal order to hand yesterday. I must say that you have been most courteous and straightforward over this matter. Indeed, I cannot conceive of a firm being more straightforward than yourselves." H. H. E.

HOLLOWAY, N. "I am in receipt of your letter and cheque, value £5, in payment for camera; and I am greatly obliged by the prompt and liberal treatment I have received in the matter." C. W.

WATSONS', The Camera House,
 Tel. No. 27. 84 High Street, Sheffield.

How to Save Money in SURGICAL DRESSINGS

Compare these prices before ordering. **WE** can save you about 30%

WHITE ABSORBENT COTTON WOOL (interleaved) in 1 lb. rolls, at 2/2 per lb.

WHITE LINT, in 1 lb. rolls, at 3/9 per lb.

BORACIC LINT, in 1 lb. rolls, at 2/8 per lb.

Packed in 1 cwt. Bales. Bales charged extra, 3/6 each.

Also packed in 56 lb. bales of each at 2/2 $\frac{1}{2}$, 3/9 $\frac{1}{2}$, 2/8 $\frac{1}{2}$ respectively.

" " 28 lb. " " 2/3, 3/10, 2/9 "

Carriage paid on 56 lb. Bales 2/6 & 1/6 each. Cheques with Order.

Bales must be paid for, and allowed for when returned.

THE PRIMO DRUG CO., 5 Bury New Road, Manchester.

SACCHARIN TABLETS.

$\frac{1}{4}$ -gr. 330 in 1 10,000 at 21/6 per 1,000

" " " " " " 25,000 at 21/3 " "

$\frac{1}{2}$ -gr. 330 in 1 10,000 at 16/6 per 1,000

" " " " " " 25,000 at 16/3 " "

Cash with Order. Reg. Post Free.

J. AUSTIN, Chemist, Alum Rock Road, SALTLEY, Birmingham

SACCHARINE TABLETS.

($\frac{1}{4}$ grain, 330 in 1)—
 5,000 at 16/9; 10,000 at 16/5; 25,000 at 16/2; 50,000 at 16/1;
 100,000 at 16/0; 250,000 at 15/10; 500,000 at 15/9.

Immediate delivery return registered post. Cash with order.

($\frac{1}{2}$ grain, 330 in 1)—
 2,000 at 21/9; 5,000 at 21/6; 10,000 at 21/3;
 25,000 at 21/-; 50,000 at 20/10; 100,000 at 20/9.

W. TRAVIS, 203 Whitecross Street, London, E.C.1.

PERFUMERS! SHORTAGE OF LABOUR

Advertisers are prepared to undertake the blending of Shampoo, Tooth, and other Toilet Powders, in large or small quantities at lowest possible rates. Good workmanship and prompt delivery. Ingredients supplied if desired at lowest market prices. Write stating requirements—

MARTIN & CO., 71 City Road, Finsbury, London, E.C.1

P.A.T.A. NOTICE.

The prices announced below will come in force as from the date of this issue:—

Advert. Price.		Minimum Retail Price.	Minimum Wholesale Price.
3/-	Mothersill's Seasick Remedy ...	3/-	26/6
7/-	"	7/-	65/6
Prices for Ireland, I.O.M., and C.I. as above, less cost of stamps all round.			
Savory & Moore's goods:—			
3/-	Carlsbad Sprudel Salts (S. & M.) ...	3/-	28/10
2/9	Pancreatic Emulsion ...	2/9	26/4
5/-	"	5/-	48/-
9/-	"	9/-	86/4
1/9	Saunders' (or Roseate) Dentifrice ...	1/9	16/9
3/-	"	3/-	28/10
6/-	"	6/-	57/6
12/-	"	12/-	115/3
1/4	"Valveless Feeders" ...	1/4	12/-
3/6	Zincolave ...	3/6	33/7
6/6	"	6/6	62/4
12/6	"	12/6	120/0
4½d.	Seccotine (Pocket size) ...	4½d.	3/6 doz.
9d.	" (Tubes) ...	9d.	39/- 1 gr. & up.
1/6	"	6/3 by 6 doz.; 72/- 1 gr. & up.	1/6 13/- doz.
1/3	Kolynos' Dental Cream ...	12/6 by 6 doz.; 144/- 1 gr. & up.	1/3 12/-
less 3/6 dis. off complete gross, for cash.			
Parke, Davis & Co.'s goods:—			
50's	Santal Oil Globules (5 min.) ...	5/-	40/6
1/6	Omega Cadum Soap ...	1/6	13/6

SACCHARINE TABLETS

¼ grain in one.

10,000 at 16/9 per 1,000.

25,000 at 16/7 per 1,000,
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Immediate Delivery Guaranteed. Postage and Packing 1/- extra.

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"HOLMIER" BRAND COMPOUND SACCHARIN TABLETS.

One is equal to a teaspoonful of sugar.
Made with American 990 Saccharin. 16/- per 1,000 Reg. post paid.
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8/6

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4
Years
5
Columns

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ONE EQUAL TO A LUMP OF SUGAR.

16/- per 1000, Post Free. Cash with order.

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DAMANCY & CO., Harrow, SWEETENING TABLETS.

To relieve ourselves of the work of distribution and thus to be able to devote more attention to the making only of these tablets, we have entered into contracts with wholesale houses to take all we make during this month (July). If we find this to answer we will continue it, but as our fitting shop has been hard at it getting all our machines into thorough working order, we may shortly have a surplus beyond what these contracts and our present orders call for, and this surplus we will offer in due course.

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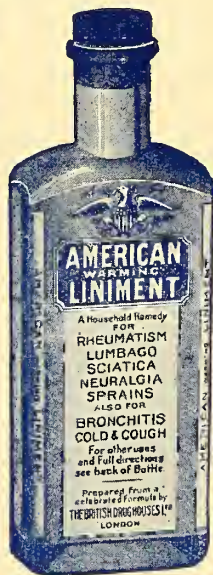
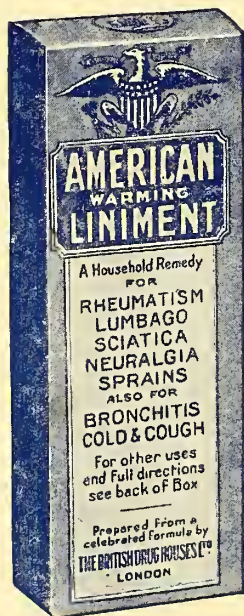
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